

**GLOBAL BUSINESS AND TECHNOLOGY  
ASSOCIATION**

**MANAGING IN AN INTERCONNECTED WORLD:  
PIONEERING BUSINESS AND TECHNOLOGY  
EXCELLENCE**

**ISBN: 1-932917-10-1**



**Editors:**

**N.J. Delener, Ph.D.  
Leonora Fuxman, Ph.D.  
F. Victor Lu, Ph.D.  
Susana Rodrigues, Ph.D.**



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**SIXTEENTH ANNUAL  
INTERNATIONAL CONFERENCE**

**READINGS BOOK**

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# **PATTERNS OF RELATIONSHIPS BETWEEN DEGREE OF INTERNATIONAL DIVERSIFICATION AND FINANCIAL PERFORMANCE IN MULTINATIONAL RESTAURANT CORPORATIONS**

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## **ABSTRACT**

*This study investigated the effect of international diversification on performance of restaurant companies and attempted to find the particular patterns of the relationships. The sample of this study consists of 45 U.S. based public multinational restaurant companies (MNRCs) with 204 observations over the period of 2008-2012. Results indicate that international diversification has a negative linear relationship with restaurant company performance. Based on the findings, it is suggested that restaurant company managers need more elaborate and prudent decision making, when implementing international diversification strategy.*

Keywords: Multinational restaurant companies; International diversification; Accounting-based measures; Berry-Herfindahl index

## **INTRODUCTION**

According to Guile (1988), similarly with manufacturing companies, service companies diversify internationally to gain resources, cheaper labor costs, and market access. However, despite some similarities with manufacturing companies restaurant companies have distinct differences from them such as intangibility which makes impossible to touch the service (Capar and Kotabe, 2003), inseparability where the process of consumption and production occurs simultaneously making impossible to inventory service products (Habib and Victor, 1991). In addition, the inseparability of production and consumption requires the buyer to make an intimate contact with the production process (Carman and Langeard, 1980). According to Sun and Lee (2012) international diversification for the restaurant companies might be more challenging than for other industries, because restaurants need local presence owing to the inseparability of consumption and production (Erramilli, 1990). Moreover, because of the heterogeneity of services it is more difficult for restaurant companies to standardize the quality of their services, which is comparatively easier for manufacturing companies. Therefore, it is very difficult to be certain about what patterns of relationships exist between international diversification and restaurant company performance. This study strives to fill aforementioned void in the literature and provide scientific evidence through empirical analysis of this issue. The goals of this study are: (1) to reconcile previous contradictory findings by proposing a two-stage theory of international diversification for restaurant companies, (2) to test this theory based on the sample of the public U.S. MNRCs over the period of 5 years between 2008-2012, and finally (3) provide sound base information for theory development in contemporary hospitality literature.

# LITERATURE REVIEW

## Theories supporting positive linear relationship

Positive linear relationship had found support in the findings of a number of studies (Chang and Wang, 2007; Han et al., 1998; Nachum, 2004; Villalonga, 2004). Nevertheless, according to Ruigrok and Wagner (2003) early studies only focused on the benefits of international diversification and suggested a positive linear form of the relationship between internationalization and performance. It is necessary to consider that internationalization might not be always beneficial to the company.

## Theories supporting negative linear relationship

Later researchers started assuming that international diversification can bring not only benefits to the company, but also increase the level of risk and failure. Recognizing these negative effects, theories that oppose international diversification started to appear in the research literature. One of the most famous theories that support negative effects of international diversification is agency costs theory. The theory argues that management and shareholders have and pursue completely different objectives and motives (Koh et al., 2009). In other words, company management might wish to increase its own power and wealth instead of maximizing shareholders' value.

In a complex, internationally diversified companies monitoring managerial decision-making might. Aforementioned theories that support negative relationship between international diversification and company performance found support in the results of studies by Fauver et al., (2004), Denis et al., (2002), Berger and Ofek (1995), Collins (1990) and Lang and Stulz (1994). However, all of these studies were based on the sample of companies from mixed industries.

## Hypothesis development

It is argued that the pattern of the relationship between international diversification and the U.S. MNRCs performance is different from a positive linear or an inverse U-shaped form of the relationship for manufacturing companies. More specifically, it is argued that the form of the relationship for U.S. MNRC is a U-shaped curvilinear. Restaurant companies might have different form of the relationship, because of unique and specific characteristics of service industry and restaurant companies. Hence, the performance of restaurant companies might decline at the beginning of international diversification. Theoretical rationale for this form of relationship is as follows:

First of all, restrictions and regulations of the host country are the most common problem encountered by international service firms (Reardon et al., 1996), as strict control regarding the extent of foreign investments in service industries still exists in most of the countries (Feketekuty, 1988). Second, because of cultural and linguistic differences of the customers (Capar and Kotabe, 2003) and intangibility of most services (Zeithaml et al., 1985), it is not only required, but also expensive to customize and culturally adapt services (Knight, 1999). The process of adaptation of services might significantly raise operation costs. Third, characteristics of the restaurant business such as intangibility, inseparability, heterogeneity, and perishability (Boddewyn et al., 1986) make restaurant industry different from other industries and especially capital intense. Hypothesis of the study summarizes the above-mentioned arguments and presented below:

**Hypothesis:** The relationship between the degree of international diversification and performance of the U.S. MNRCs exhibits a U-shaped curvilinear form, where performance decreases up to a certain degree, beyond which high levels of international diversification increase performance.

# METHODOLOGY



## Dependent variable

In this study company performance is estimated by using accounting based measures of company performance and profitability: return on assets (ROA), return on equity (ROE) and return on sales (ROS). The primary focus of (ROA) ratio is the net income (Ross et al., 2003) and Sun and Lee (2012) used it as a performance proxy in the study of U.S. restaurant companies. Moreover, ROA has been used in the studies of Ruigrok and Wagner (2003), Gomes and Ramaswamy (1999). Return on equity (ROE) is the accounting ratio that is used to measure how efficiently the company generates its profits. Management's effectiveness and reward of the management is also measured by ROE (Han et al., 1998). Qian (1997) and Han et al., (1998) have used this accounting ratio in the previous international diversification and performance related studies. Finally, return on sales (ROS) is the ratio that helps to evaluate how much profit produced by the company per dollar of sales. The main rationale behind including this measure of performance was based on the argument of Geringer et al., (1989) in favor of using this measure over ROA. According to Geringer et al., (1989) application of ROS helps avoid the impacts of different asset valuations arising from new investment or depreciation. Moreover, restaurant companies tend to have a great amount of intangible assets according to Capar and Kotabe, (2003).

## Independent variable

Degree of internationalization is the independent variable in this study. Various international diversification measures exist in the literature. For example, in his study Lee (2008) measured the degree of international diversification as:

$$MNHC\% = \frac{MNHC_F}{MNHC_T}$$

Here  $MNHC_F$  represents the number of properties in foreign countries and  $MNHC_T$  represents the number of total properties of the company. However, this study employs the Berry-Herfindahl index to measure international diversification, which includes the number of entities and every entity's weight. It is measured as follows:

$$(1 - \sum s_i^2)$$

Here  $s_i$  represents the number of MNRCs properties overseas. The Berry-Herfindahl index was chosen, because it was considered to be a more precise and adequate measure of international diversification rather than the unidimensional measure employed by Lee (2008).

## Control variables

Control variables of this study include size, leverage and the degree of franchising. Size of the company controls for the economies of scale effects and measured by the natural logarithm of total assets (Nachum, 2004). It is one of the most generally used control variables according to Tallman and Li (1996). Leverage is measured by debt-to-equity ratio consistently with the study of (Kang and Lee, 2013). This control variable was used as a control variable in the studies of Koh et al., (2009) and Sun and Lee (2012). A number of previous studies with the similar approach also included size and leverage control variables (Riahi-Belkaoui, 2004; Strike et al., 2006). At last, degree of franchising measured by dividing the number of franchise sales by company total sales in this study (Kang and Lee, 2013).

## Models

This study applies regression models to test the hypothesis of this study. Specifically, Model 1 represents linear model and Model 2 represents curvilinear model. Accounting-based measures: ROA, ROE, and ROS were included in both models in order to measure restaurant company performance. The degree of international diversification is measured by the Berry-Herfindahl index. Additionally, based on the hospitality diversification related literature control variables such as size, leverage and the degree of franchising were included in each of the models. However, the study did not include industry variable that used to control for industry effects (Gomes and Ramaswamy, 1999), because it focused only on the restaurant industry (Lee, 2008).

**Model 1**

$$Perf(ROA, ROE, ROS) = \alpha + \beta_1 SIZE + \beta_2 LEVERAGE + \beta_3 DOF + \beta_4 ID + \varepsilon,$$

**Model 2**

$$Perf(ROA, ROE, ROS) = \alpha + \beta_1 SIZE + \beta_2 LEVERAGE + \beta_3 DOF + \beta_4 ID + \beta_5 ID^2 + \varepsilon,$$

*Perf* represents US MNRCs performance measured by accounting-based measures (ROA, ROE and ROS); where ROA represents net income divided by total assets; ROE represents net income divided by total shareholders' equity; ROS represents operating income divided by total sales; SIZE represents a size of the company measured by the log of total assets; LEVERAGE represents capital structure of the company estimated by debt-to-equity ratio; DOF represents the degree of franchising measured by dividing the number of franchised revenues by company total revenues; ID represents international diversification measured by the Berry-Herfindahl index; and ID<sup>2</sup> represents the squared term of international diversification ID.

**Data**

This study collected the sample of publicly traded U.S. multinational restaurant companies (MNRCs) based on the North American Industry Classification System (NAICS) codes to identify primary activities of the companies. The sample of publicly traded U.S. MNRCs was based on NAICS codes: 722110 (full-service restaurants) and 722211 (limited-service restaurants), similarly with the studies of Tang and Jang (2010) and Kang et al., (2011).

This study uses two sources to collect the data: (1) restaurant companies' annual reports (10-Ks) and (2) Lexis Nexis Academic. Companies' annual reports (10-Ks) provide relevant data regarding properties of the company, number of countries operating, franchising and other valuable financial data. Restaurant companies' 10-Ks were retrieved from Electronic Data Gathering Analysis and Retrieval (EDGAR) system, through which publicly traded companies are required to file their reports. In addition, Lexis Nexis Academic provides an access to more than 15000 business, legal and news sources and as well as a detailed financial information of more than 80 million public, private and international companies.

To be included in the sample the company had to be: (1) a restaurant company and (2) a publicly traded U.S. MNRC. The sample period of this study spans fiscal years 2008 to 2012. After careful examination and removal of the companies that did not provide necessary data in their 10-Ks retrieved from EDGAR system and Lexis Nexis Academic, the study obtained (134) observations for full-service restaurants and (70) for limited-service restaurants from the total sample of 45 restaurant companies. Total number of observations for both multinational full-service restaurants and limited-service restaurants was (204).

**RESULTS****Descriptive statistics**

Descriptive statistics of variables included in main analyses for multinational restaurant companies are as follow. ROA ranges from 0.0002 to 1.0085 with a mean of 0.1140 and a standard deviation of 0.1386. ROE varies from 0.0003 to 14.369 with a mean of 0.6290 and a standard deviation of 1.7990. Finally, ROS ranges from 0.0020 to 1.2701 with a mean of 0.1221 and a standard deviation of 0.1310. Company size (SIZE) has a mean of 12.028 and a standard deviation of 2.4444. LEVERAGE varies from 0.0000 to 73.844 with a mean of 4.6116 and a standard deviation of 11.480. The degree of franchising (DOF) ranges from 0.0000 to 0.9348 with a mean of 0.1242 and a standard deviation of 0.1965. International diversification (ID) ranges from 0.980769 (Dave & Buster's, Inc.) to 0.999974 (Yum! Brands, Inc), and has a mean of 0.996763 and a standard deviation of 0.004134. Finally, (ID<sup>2</sup>) that represents the squared term of international diversification (ID) has a minimum of 0.961908, maximum of 0.999949, mean of 0.993554 and a standard deviation of 0.008209.

**Summary of results**

Table 1 presents the results of analysis of linear regression (Model 1) and curvilinear regression (Model 2) models. Performance was measured by (ROA, ROE, and ROS) in both models. As it can be seen all models are statistically significant at  $P < 0.01$  level. There is almost no difference in  $R^2$  of Model 1 and Model 2 where performance was proxied by (ROA). The degree of change is very small in  $R^2$  and adjusted  $R^2$  of two models, too. The results of the analysis suggest that the form of the relationship between international diversification (ID) and performance (ROA) is not curvilinear.  $R^2$  and adjusted  $R^2$  are very similar, with a very little degree of change once again when performance was proxied by (ROE). Hence, the results suggest that the relationship form between internationalization (ID) and performance (ROE) is not curvilinear.

At last, interestingly it can be noticed that  $R^2$  of curvilinear model (Model 2) where performance was measured by ROS, is slightly higher than in linear model (Model 1) where performance was also proxied by ROS. In addition, adjusted  $R^2$  of Model 2 appears to be higher than in Model 1, too.

**Table 1 Summary of regression analysis for Model 1 and 2 †**

PERF proxied by ROA	$R^2$	adj. $R^2$	F-value	df1	df2	cons
Model 1	0.1288	0.1113	7.35**	1	203	10.22828
Model 2	0.13	0.108	5.92**	2	203	224.1337
Change	-0.0012	0.0033	1.43			
PERF proxied by ROE	$R^2$	adj. $R^2$	F-value	df1	df2	cons
Model 1	0.3712	0.3585	29.36**	1	203	55.60079
Model 2	0.3734	0.3576	23.60**	2	203	3888.867
Change	-0.0022	0.0009	5.76			
PERF proxied by ROS	$R^2$	adj. $R^2$	F-value	df1	df2	cons
Model 1	0.3987	0.3866	32.98**	1	203	7.469961
Model 2	0.4312	0.4168	30.02**	2	203	1058.646
Change	-0.0325	-0.0302	2.96			

†\*\* $P < 0.01$

Table 2 compares the results of regression analysis for linear model (Model 1) and curvilinear model (Model 2). In each of these models accounting-based measure ROS has been used to measure financial performance of companies. As it can be seen,  $t$ -values of independent variables vary in each of these two models. Company size (SIZE) and company capital structure (LEV) both show negative, but not significant relationship with a very small degree of change. Although, degree of franchising (DOF) appears to have positive impact on company performance at the statistical significance level of 0.01 in two models. DOF in linear model of the study (Model 1) shows a higher  $t$ -value than in Model 2. The squared term of internationalization ( $ID^2$ ) appears to have positive effect on company performance with the  $t$ -value of 3.37 and the 0.01 significance level in Model 2.

According to the results of regression analysis for both models, it can be concluded that the relationship between the degree of international diversification and the U.S. MNRCs' performance does not exhibit a U-shaped curvilinear form of relationship. Statistical results show that the relationship between the degree of international diversification and performance of the U.S. MNRCs does not exhibit a U-shaped curvilinear form. Therefore, the final decision is to reject hypothesis of the study.

**Table 2 Comparing results of regression analysis for Model 1 and 2 †**  
PERF proxied by ROS

Models	Variable	SIZE	LEV	DOF	ID	$ID^2$
Model 1	t-value	-0.34	-0.77	10.82**	-4.12**	

Model 2	t-value	-0.71	-1.02	9.75**	-3.38**	3.37**
Change		0.37	0.25	1.07	-0.74	3.37

†\*\*P<0.01

## DISCUSSION

This study attempts to find the form of the relationship, as well as to find how internationalization affects performance of restaurant companies. The study finds that international diversification has a negative linear relationship with the performance of U.S. MNRCs. This finding supports the results of studies done by Denis et al., (2002), Berger and Ofek (1995), and Lang and Stulz (1994). These researchers found similar negative linear relationship in the mixed sample of companies from different industries. Results of studies by Lee (2008), who did a study on the U.S. multinational hotel companies (MNHCs), and of Capar and Kotabe (2003), who did a study on German service firms are not supported. As it was mentioned, results may vary across different countries and industries. The reason for obtaining different results might be due to the fact that restaurant companies belong to a different type of industry and have other company characteristics, which vary from lodging and service industries (Kang, 2011).

In addition, the effect of international diversification might be different depending on the country. For instance, results with the sample of European companies may vary from the results obtained from North American companies. For instance, in their research Capar and Kotabe (2003) assert that it is difficult to clearly separate borders if the company is in the EU, as people who live in neighboring countries may easily cross borders. In contrast to American companies, European companies can easily gain access to geographically close markets, with culturally and linguistically similar backgrounds within the EU. Therefore, European companies can first diversify their operations into countries with similar law systems and which are very close geographically, and culturally, too. This can help to make international diversification less dramatic for European companies.

Furthermore, restaurant companies diversify their operations in more international geographic markets than lodging and service companies. For example, company like Yum! Brands operated in 125 countries and territories, and McDonald's in 119 countries around the world in 2012 according to 10-Ks of these companies. Measures of international diversification might also lead to different results in the study. To measure internationalization Lee (2008) simply divided MNHC properties in foreign countries to the number of total MNHC properties, while Capar and Kotabe (2003) applied foreign sales to total sales (FSTS) ratio in order to measure it. Using these kinds of unidimensional measures to estimate international diversification does not precisely measure the degree of internationalization, which might bias the results. On the other hand, the Berry-Herfindahl index is a more adequate measure of international diversification, because it incorporates both the number and weight of entities. To summarize, results of analysis imply that international diversification negatively influences company financial performance and companies end up gaining disadvantage from it.

## Contribution and practical implications

Motivated by mixed views and findings and very scarce investigation of this particular subject in the literature, the study attempted to fill existing gap. In particular, the major contribution of this research to the hospitality research literature is in presenting the evidence that supports negative effects of diversification on performance in the restaurant industry. Moreover, despite that, most of previous studies examined the current subject through inclusion of service firms, manufacturing companies or mixed companies' sample from various industries, this study includes only the sample of restaurant companies. Examination of the subject in unique restaurant industry context is crucial in finding the right answer, as results may significantly vary even across the industries with homogeneous characteristics. In conclusion, after careful examination of the research subject and theory based on the sample of the U.S. MNRCs, this study finds negative linear relationship between internationalization and performance. More specifically, international diversification has a negative effect on the U.S. MNRCs' performance. Considering the fact that internationalization increases cost, which negatively impacts company performance, it is strongly advised to be prudent for restaurant company managers, when expanding their company operations internationally.

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# **THE IMPACT OF KNOWLEDGE CREATION AND EXCHANGE OF SMES PERFORMANCE IN KAZAKHSTAN**

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## **ABSTRACT**

*The most important factors affecting SMEs are knowledge creation and exchange. Knowledge creation is the ability of companies to use its elements of the knowledge in the most effective and efficient way (Nonaka and Takeuchi,1995). This study focuses on the analysis of the relationship between knowledge creation and knowledge exchange and company performance of 70 SMEs operating in Almaty in Kazakhstan. Especially, in an environment which is characterized by dynamic changes and high turbulence knowledge creation and exchange does not limit the company from gaining other but making the connection with the performance of the company (Nonaka,1994). Based on that, this study analyzes the connection between knowledge creation and exchange and company performance of SMEs which operate in Kazakhstan. Also in this study the relationship between knowledge creation and exchange of the small and medium enterprises are studied with the relationship to its performance.*

**Keywords:** knowledge creation, knowledge exchange, SMEs, Kazakhstan

## **INTRODUCTION**

Knowledge creation and exchange are considered the important elements of knowledge development process in any organization. The knowledge-based of the firm which define knowledge as the main source for competitive advantage in organization explains possibilities of organization in development of new knowledge. McEvily and Chakravarthy (2002) argued that knowledge creates sustainable differentiation which strategically influences to company's actions. In order to support knowledge as main resource organizations tend to find multiple ways for knowledge obtaining. By doing this, they minimizing failure of organizational barriers which are blocking getting valuable knowledge both for employees, organization, and stakeholders. This study focuses on the identifying the relationship between knowledge creation and exchange of SMEs performance in changing environment.

## **LITERATURE REVIEW**

### **Knowledge**

Knowledge-based view of the firm defines knowledge as the resource for organizational competitive advantage. Knowledge holders share same knowledge and create organizational knowledge on the basis of own experience. knowledge of employees brings the main value for organization (Grant, 1996). He stated that Grant firm's primary task is to integrate specialized knowledge of multiple individuals despite effective coordination problems and goal congruence. Because knowledge is a resource for company it is crucial to develop it constantly and knowledge exchange gives opportunity not only to create individual knowledge but also to create knowledge for organization.

## **Knowledge-based theory of the firm**

The development of knowledge-based view started from the resource-based theory. Simon (1991) stated that "all learning takes place inside individual human heads; an organization learn in only two ways: (a) by learning of its members, or (b) by ingesting new members who have knowledge the organization didn't previously have". Employees of organization possess knowledge which can be developed and attraction of new individuals helps organization to create new knowledge. Knowledge creation and knowledge application are also important elements of organization in knowledge-based view of firm.

## **Knowledge creation**

Nonaka and Takeuchi identified four processes (socialization, externalization, combination and internalization), in which new knowledge is created between the explicit and implicit. They determined that the organization creates knowledge through the interaction of tacit and explicit knowledge, and this is called the transformation of knowledge. The transformation of knowledge - is a process of social interaction, which is not limited to one person. SECI model is about knowledge which is created by workers who are using it as an organizational knowledge.

Socialization - the process where individuals share their experiences, views and ideas. This process occurs in the exchange between employees and customers or suppliers. The organization receives from them, which is converted into knowledge and subsequently used by the company to achieve objectives. Externalization - the process by which tacit knowledge is converted into explicit. Tacit knowledge held by employees, customers or suppliers become available to all in the form of explicit knowledge, which then create new knowledge. Combination - a process in which there is an exchange, integration and reconfiguration of explicit knowledge into more complex and systematic explicit knowledge units. At this stage, the creation of databases and repositories of knowledge. Internalization - a process in which explicit knowledge assimilated and converted into implicit through the process of internalization. Four of the process model SECI include basic components for optimal knowledge creation by individuals.

## **Knowledge exchange**

Some authors consider knowledge transfer and knowledge exchange have same meaning (Mowery et al.,1996; Wijk van et al.,2008). Ghobadi and D'Ambra (2012) argued that knowledge exchange is successful only when receiver of knowledge understands it. Therefore, the quality of knowledge has an important role in the relationship between owner and receiver of knowledge. The easier to use and apply received knowledge the more output should be expected. Kogut and Zander (1992) highlighted that successful knowledge exchange leads to new knowledge and output. To improve knowledge exchange organizations tend to manage it by applying specific mechanisms. Depending on the nature of business those mechanisms are vary and become unique for each company. Causal ambiguity of knowledge and tacitness are considered as a barriers to knowledge exchange (Blomkvist,2012). The main problem with knowledge is that it is tacit. It becomes difficult to exchange tacit knowledge easily as it is with explicit knowledge. Moreover, recipient can apply knowledge differently compared to original, so it should more simple to be perceived without major changes.

## **Organizational performance**



Organizational performance shows the results of company's development. It represents achievements of organization and its results of a certain period of time. However, company performance is a result of strategic management of a company, it depends and related to its all activities and how well company performs to achieve its goals. Majorly, company performance shows success or failure of organization. All actions of company are result of its company performance. Von Krogh (1998) stated that knowledge management increase collective knowledge of organization which helps organization to compete. But knowledge management can change strategy of an organization while creating innovativeness and improving performance.

Because of the role of SMEs in economy, knowledge is considered to be the most influential to improve performance of SMEs. In that case, the relationship between knowledge and SMEs directly influences to the performance of SMEs and as result influences to the economic growth, contribution to the economy. Many researchers found out that transparency in SMEs have a positive impact to knowledge development and knowledge sharing. It means that everyone in organization has an access to available knowledge and has ability to contribute to organizational knowledge more quickly and easily. Knowledge in SMEs is important because opportunities for organization to compete more successfully.

## **METHODOLOGY**

### **Significant and objectives of research**

The objective of this research is to study relationship between knowledge creation and knowledge exchange and company performance using data collected from interviews conducted with managers of SMEs which operate in Kazakhstan. We selected 70 private firms from the initial database that included companies of Kazakhstan. Selection criteria included those that are small and medium sized enterprise. The number of interviews was 70, only those companies confirmed willingness to answer questions. In particular, we wanted to identify how knowledge creation and exchange influence performance of firms operating in Kazakhstan does. We have conducted interview with managers of SMEs. Before interview, we have sent questions of our interview and identified which companies want to take part in research.

### **Sample, Data Collections, Measures and Limitations of Research**

Sample of our research consists of 70 companies. We have given questions of our interview beforehand, so that respondents will have some information about interview structure. Interviews were conducted in Russian language. Moreover, we asked 20 questions about knowledge creation and exchange and its impact on company performance. The semi-structured interviews and literature review formed the basis for developing our questionnaire, which contained five Likert-type scale. The subject of this work has some limitations caused by different sizes of SMEs and industries.

## **ANALYSIS AND RESULTS**

We have interviews with seventy top managers of SMEs. Results of our interview showed that majorly knowledge creation and exchange influences to improvement in performance. Twelve top managers of companies stated that only recently new knowledge creation and exchange has become noticeable in their company and since then financial results improved. Further, analysis reveals that companies creating new knowledge. Companies sustain it by investing in human capital, knowledge of employees. Interviewed top managers highlighted process of creation of new knowledge in their companies. Knowledge exchange with partners are not used by all SMEs meaning that it's more difficult for them to openly share knowledge. Performance of SMEs in relation to knowledge creation and exchange was measured by market share, success, profitability, and innovativeness and growth rate. Respondents were asked to answer questions with five Likert-type scale. Results showed that 42 respondents considered their companies successful when using knowledge exchange. That means, only three companies consider knowledge creation and exchange as a real source for improving company performance which affects positively on market share. However, growth rate and profitability were measured by 32 SMEs as "3".

## CONCLUSION

Knowledge creation and exchange becomes are crucial for competitive advantage of company. Creation and exchange of knowledge requires constant employees' involvement because they are holders of knowledge. Knowledge creation and exchange are the main sources for SMEs in Kazakhstan to develop knowledge. It aimed to stimulate new knowledge generation in SMEs as well as the development of industry. As a result of it, company performance constantly changes because of new knowledge which become available for organization. However, SMEs by creating new knowledge and exchange processes as an important elements for future development, the knowledge management is the important for sustaining new knowledge. Thus, the impact of knowledge creation and exchange on performance of SMEs define the development of organization and its position on the market.

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# FORGET ME NOT: THE IMPACT OF SOCIAL MEDIA ON LUXURY FASHION SECTOR

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## ABSTRACT

*During the last decades, Internet technologies, along with its prototypical subsets, have attracted the attention of management scholars and practitioners alike, and both theoretical and empirical studies on this topic have flourished in almost every disciplines. However, this broad-based appeal has generated a number of controversies and ambiguities on how social media platforms should be used to reposition luxury fashion brands in order to take advantage of the recent proliferation and evolving online brand communities. The recent paper argues that social media platforms provide flourishing environments for luxury fashion brands.*

**Keywords:** luxury fashion, social media, online brand communities, social behaviour, brand image

## INTRODUCTION

With growing interest in using social media as a means to attract more customers through effective communications, luxury brands have started to incorporate an e-business into their strategies. Viral marketing, buzz marketing, and social media marketing have become more influential marketing tools on Web 2.0 using social media platforms such Facebook, Twitter, and many others to create buzz or word-of-mouth promotion. This targets social media users, who, by being present in online communities, benefit not only from sharing news and information, but receiving advice and recommendations from other users. Therefore, marketers focus on online brand communities, which are the web-based community of tradition brand communities defined by Muniz and O'Guinn (2011) as a distinct group of users without territorial limits and bounded by mutual interests in a particular brand.

Brand communities are seen by many academics and practitioners as great business opportunities to effectively influence customers' purchasing behaviours and to more deeply understand customers by monitoring their views and opinions. With global populations having an online presence nearing two billion (Okonkwo, 2010), this makes the Internet a place where luxury brands must build a presence. Geerts and Veg-Sala (2001) in their research revealed that selling online is a real opportunity for luxury brands. As they stated, the Internet should be considered one of the communication tools which give the brands the possibility to express their identity values and maintain the brand story. Social media offers all the means to strengthen the brand values and sustain the brand image. With the appearance of e-business, luxury brands face many challenges and at the same time many opportunities. One of the challenges in adopting Internet strategies is that of corporate orientation (Okonkwo, 2010, p. 20). The emergence of the Internet requires new strategies for communicating and operating online. A predominant part of luxury companies is still struggling to understand the opportunities provided by social media platforms and sees the Internet as a threat. They believe that an online presence is for advertising and selling, rather than "a multi-channel for communications, branding, client services, retailing, consumer analysis, client congregation, marketing, customization and product development" (Okonkwo, 2010, p. 21). Another significant task which needs to be taken into consideration is how to represent and effectively transform brands' personality, identity, and image. The current paper aims to examine the impact of social media on luxury fashion brands.

## THEORETICAL FRAMEWORK AND CONTEXT

With the advancement of technology, social media has become available for social behaviour. Earlier, social interactions enabled people to meet in person then communicate with mail and letters. E-mail followed and now social media or social media platforms (Feenberg & Barney, 2003). The early online devotees believed that group interaction would improve the quality of life. The very first online communities were based on independent computer conferencing systems, such as EIES (Electronic Information Exchange System) and the Well. The success of these online communities had a great impact on developing the image of the computer. Early designers Turoff and Vallee developed software that transformed face-to-face environments to the network. The main features of this software included bonding (forming online groups), tracking (listing participants' discussions), archiving (maintaining records of discussions), and warranting (ensuring participants' identities) (Hiltz & Turoff, 1993). Some academics have debated the prospects of online communities (Barney, 2004; Borgmann, 2004; Dreyfus, 2004), developing arguments against online communities. They agree that the "spacious" form of online community is an inadequate replacement for a difficult reality. However, postmodern theorists who see in the Internet a paradigm of desirable social transformations positively view online communities as the dawn of a new networked age (Turkle, 1995; Ozuem 2004). Moreover, Bakardjieva (2004, p. 12) "dismisses the general question of the possibility of online community on the grounds that our evaluation of the Internet should be guided not by the distinction between the real and the virtual but by human interaction and commerce." Her study of the communicative and communal use of the Internet shows many forms in which individuals meet other people and obtain knowledge of them through online communities. She believes that promoting and discovering online communities will contribute to a humanistic study and to shaping the Internet. The fast growth of social media and the motivation of brand companies to get involved in social media provide a basis for online brand communities to be present in computer-mediated environments. A brand community is a community of individuals created through mutual feelings towards a product or brand (Muniz & O'Guinn, 2001). Their ethnographic study reveals three main indicators of community within brand communities: shared consciousness, shared rituals and traditions, and obligations to society. Schau, Muniz, and Arnold (2009) conducted a meta-analysis which determined four groups of practices through which value is cocreated in brand communities. Community is a main construct in social thought. Theorists and academics have focused on the subject of community from the last century until today (Dewey, 1927; Freud, 1928; Kant, 1996; Fisher, 1975; Merrit, 1966; Hummon, 1990). Apart from comprehensive studies in this area, especially in the context of consumption, community in the context of consumer behaviour has occasionally been mentioned (Muniz & O'Guinn, 2001). Muniz and O'Guinn (2001) introduced the idea of brand community as "a specialised, non-geographically bound community, based on a structured set of social relationships among admirers of a brand. It is specialised because at its center is a branded good or service." Most communities share similar features such as consciousness, rituals, traditions, and moral responsibility. In addition, as brand communities, they play an important role in the brands' social construction and heritage.

## COMMUNITY AND BRAND COMMUNITY

The concept of community is fuzzy and intricately complex. For example, Gusfield (1978) proposed that it was a consciousness of kind, which means a mutual bond between the members and the collective sense of difference from others outside the community. Weber (1978) argued that a community is based on shared history, culture, and traditions, where rituals and traditions maintain the community's shared history, culture, and consciousness and instil behavioural customs and values. Another not less important characteristic of community is a sense of moral responsibility. It is a sense of responsibility to the community, which occurs as a collective action to intimidation. Community becomes a common understanding of a shared identity, and over time, due to emerging communication technologies, communities unite individuals with a commonality of purpose and identity without any geographical restrictions (Muniz & O'Guinn, 2001).

Rapid development of social media platforms has enhanced the emergence of brand communities. "Computers construct a virtual social world with remarkable similarities to the world of face-to-face communication" (Feenberg & Barney, 2004, p. 1). The virtual world nowadays connects not only companies but also consumers by providing access to content and communication through the Internet (De Valck et al., 2009). Examples of virtual interaction and communication tools embrace blogs, personal web pages, and social media

networks (for example, Facebook and Twitter). These tools facilitate new forms of consumers' interaction experiences, which take part in the growth and establishment of consumer-brand relationships (De Valck et al., 2009). The Internet has enabled people around the world to communicate with each other instantly, despite geographical distances and different time zones. Within social media sites, users unite and create their own communities. The modern concept of community embraces the idea of a group of people bonded by culture, who do not necessarily live in a similar neighbourhood (Rheingold, 1996). For the community to progress, members have to have shared feelings or belongings (Weber, 1978). According to Preece (2001), the online community can be understood as a group of people who interact socially to satisfy their own needs or play a special role within the community. The notion of organising such a community rests on the basis of similar interests, needs, information, or even services. As the popularity of online communities grows, marketers and consumers create and encourage relationships between consumers and brands. While marketers can promote and build brands by advertising their products and services, consumers can build online brand communities and actively attract other consumers to engage in community activities (Lee et al., 2009). Preece (2001) suggested two concepts of understanding the development of online communities: sociability and usability. "Moderators, managers, practitioners and participants benefit from becoming familiar with these concepts. Sociability and usability form a bridge linking about human behaviour to appropriate social planning, policies and software design for successful online communities" (p. 7). There are different reasons why people engage in online communities. Some want information or support and interaction with other people, and some want to communicate their ideas or opinions. Hennig-Thurau et al. (2004) reveal eight particular factors which motivate consumers to participate and contribute to online communities: expressing negative feelings, showing affection to other online community participants, self-enhancement, seeking advice, social benefits, economic benefits, platform assistance, and helping the company. Feenberg and Barney (2004) described online communities as "stable, long-term online group associations mediated by the Internet or a similar network."

Muniz and O'Guinn's study of brand community revealed the social nature of brands and suggested an extension and a shift away from traditional models of customer-brand relationship towards a customer-customer-brand triad. According to Muniz and O'Guinn (2001), a brand is viewed as a social object developed and constructed by consumer feedback and consumer insight, giving the consumer an active role in the brand's development. Consumers become loyal by actively committing to the particular brand. Furthermore, brand communities enable consumers to have considerable influence and provide their members with social benefits (Muniz & O'Guinn, 2001).

From a theoretical perspective, brand communities improve the customer-brand dyad. The interaction within the community influences the members' perception of a brand and their opinion and attitude towards the brand. Bagozzi and Dholakia (2006) state that according to their research, brand communities influence brand involvement, brand loyalty, and positive word of mouth. For marketers, brand communities contribute to market research or involve their members in new product development (Kozinets, 2002; Fuller, Matzler, & Hoppe, 2008). Algesheimer et al. (2005) support this notion by stating that maintaining brand communities is cost effective and powerful.

Earlier, luxury fashion companies were mostly endorsed by brand valuables and loyal customers. However, globalisation and lower entry barriers for new brands have led to stronger competition and changes in the marketplace. Certainly, globalisation and the development of ICT have made luxury brands more accessible (Kim & Ko, 2012). Now consumers can shop online, access any fashion brands, and instantly exchange brand experiences with other consumers. As a result, consumers have become more knowledgeable, more rigorous, and more resistant to influence. Consequently, many fashion brand companies have experienced technological transformation at the same time as their customers, provoking the introduction of new e-marketing tools and strategies. Especially Web 2.0 technologies have had a great impact on fashion, beauty, and retail industries (Okonkwo, 2007). Web 2.0 technologies have boosted the appearance and increased the number of online brand communities on social media (Muniz & O'Guinn, 2001; Muniz & Shau, 2005), allowing members of these communities to communicate their ideas and opinions online, as well as share their experiences with each other. Certainly, online brand communities have become an effective tool for luxury fashion brands to establish stronger relationships with their consumers. There are two main categories of online brand communities: official and spontaneous (source for this categorisation?). Official online brand communities are created by fashion brand companies with the main aim of introducing their consumers to their offerings in the luxury sector and at the same time allowing consumers to exchange their fashion experiences. Spontaneous online brand

communities are created by their fans on a voluntary basis. With this in mind, many luxury fashion companies have created their Facebook and Twitter accounts. Simultaneously, many fashion brand fans have made their own online brand communities. Both benefit from being able to communicate with each other without any restrictions in time, place, or content by transforming the old one-way communication into interactive socialising (Okonkwo, 2007; Okonkwo, 2010; Okonkwo & Assouline, 2011). Furthermore, online brand communities have a significant influence on brand reputation. As Kim and Ko (2010) state, companies that avoid using social media as part of their online marketing strategy are missing the opportunity of competitive advantage.

There is an ongoing discussion on whether brands should be present in social media (Cova & White, 2010; Brasel, 2012; Bruhn, Schoenmueller, & Schafer 2012). For example, Laroche, Habibi, and Richard (2012) support this idea as they consider social media to be a medium between brands and customers. Companies develop this relationship between brands, and customers may become more loyal to the brand. Today, companies and their brands should consider social media as one of their main marketing activities. Social media opens up new channels for interactions and can entirely reposition brands by facilitating interactions between the customers and the organisations they interact with (Divol, Edelman, & Sarrazin, 2012).

According to Mangold and Faulds (2009), social media is a new fusion of the promotion mix, while in traditional marketing communications, promotion is controlled by advertising, selling, direct marketing, and harnessing customer services tools. In social media marketing, control over the promotional mix is minimised. Now companies with social media presence have less power to affect consumer choices. Social media platforms are independent and allow consumers to communicate with each other. Even though marketers cannot control the dissemination of information, they can still monitor and input to debates (Mangold & Faulds, 2009). Mangold and Faulds (2009) argue that few companies regard social media as a significant part of their promotional mix. Despite the fact that social media has an influence on the marketplace, the modus operandi in shaping relevant activities is not as effective as it can be. It is important to acknowledge that consumers perceive social media as a trustworthy source of information, more so than other aspects of the marketing mix (Foux, 2006). For example, social media sites like Facebook or Twitter enable people to “befriend” or “follow” favourite brands and to identify germane brand communities. They can also build network relationships and exchange brand information. In 2009, Ferrero’s Nutella Facebook page was the third most popular corporate page, tallying some 4.9 million fans. Effective communication with customers made Nutella one of most successful brands on Facebook (Wasserman, 2009; Cova & Pace, 2006). There are other successful companies like Jeep or Harley Davidson (Shau, Muniz, & Arnold, 2009) that have built their brand communities on social media platforms such as Facebook and Myspace (Kaplan & Haenlein, 2010). Brand communities support their members by sharing essential information, and they draw attention to different values (Shau, Muniz, & Arnould, 2009). Mangold and Fauld (2009) state that one of the functions of social media is to facilitate discussions amongst customers. Social media is an extended form of traditional word-of-mouth communications. Customer loyalty, positive word of mouth, and the ability of the company to recover quickly from negative company feedback all depend on customers’ perception of a brand’s socially responsible behaviour (Costa & Menichini, 2013; Calabrese et al., 2013). From this viewpoint, online brand communities have a great influence on increasing public awareness of a company’s social faithfulness. Moreover, online brand communities play a great role in the quantity and quality of the company’s relationships with its customers, for example, the quality of services, and it includes the company image (Aaker, 1996b). Currently, increased usage of social media amongst consumers helps them to make purchase decisions and assess brands in the evolving Internet platform. As a result, companies can reach their customers and influence their decision-making and buying behaviour (Swain, 2009). Social media has marginalised the obstacles to the flow of information amongst people, and it is now easier for marketers to communicate with their customers and target the audiences who are not familiar with the brand. According to Shaver (2007), companies need to build a strong social media presence in order to attract customers, as they are influenced by social media. To build the relationship and gain trust and loyalty, the presence of social media requires companies to set strategies for social media presences. However, some researchers argue that brand communities based on social media could produce positive effects for brands. Kim and Ko (2010) stated in their research that social media has had a great influence on brand reputation. Others like Fournier and Avery (2011) contradict these statements by saying that social media is not always an ideal environment for brands. Companies might be at risk (Fournier & Avery, 2011), as customers have more power than before and companies increasingly struggle to manage information about their brand. Customers can get involved in discussions or online complaints when they are not satisfied with the brand (Kaplain & Haenlei, 2010; Ward & Ostrom, 2006). Furthermore, consumers may also produce their own interpretation of meaning

and strategy associated with the brands they prefer (Wipperfurth, 2005). Hence these consumers produce a linking value that is not always exactly what the brand strategist had in mind (O'Guinn & Munis, 2005)

## **MANAGERIAL IMPLICATIONS**

This paper has a number of implications for brand management. First, it recognises the social nature of brands. Second, it aims to change the traditional perception of a consumer-brand dyad to a new concept of a consumer-brand-consumer triad by asserting that brands are social objects and socially constructed. Third, it reveals that consumers are actively involved in the creation of brand communities, off- and on-line. Many academics (Aaker, 1991; Keller, 1993; Fournier, 1998; McAlexander & Schouten, 1998) argue that brand communities affect brand equity by influencing all four of its components: perceived quality, brand loyalty, brand awareness, and brand associations. Finally, a recommendation is made: practitioners should work on developing strong brand communities, as they lead to socially embedded and entrenched loyalty and brand commitment.

With the rapid growth of social media platforms, brands have been trying to work out how online brand communities can be employed to help brands grow and perform even better. As with anything new, practitioners concentrate on mechanisms rather than purpose, which have created more confusion rather than a clear picture of what their business role can be and how they work. The colossal reach, low cost, and popularity of social media platforms are motivating brand managers to take advantage of these characteristics, as brand communities embedded on social media platforms positively influence the shared consciousness, shared rituals, and obligations to a society of community members. If managers aim to enhance brand loyalty, they have to promote brand use and impress management practices on their brand communities, which means communicating information or other activities that help brand community members to use their branded product more favourably and manage external impressions and images of the brand (Schau et al., 2009). These activities should be promoted easily with social media capabilities of sharing information and connecting people. Also, marketers should enhance value in communities by highlighting obligations and commitment to society. The more members feel committed, the more they get involved in practices that create value for the community.

Despite the fact that a good deal of research has been carried out on the influence of brand communities on brand equity and identity, the present research has indicated that social media platforms give the ability to companies and their brands to facilitate real-time interactions and provide valuable consumers' feedback on products or services, as well as positioning the brands on social media platforms and receiving significant support from online communities. Furthermore, online brand communities give new opportunities for managers to position their brands and improve their strategies for acquiring new customers.

This study offers several potential contributions on aspects of social media platforms, which can be used to improve the factors influencing decision-making processes of consumers and customers' integration processes in joining these brand communities, as well as the factors influencing the brand image. The implications of this review are of significance for marketing professionals and researchers in the field of social media and brands. The findings of this research could serve various purposes, especially application to the creation of effective integrated marketing strategies by including social media or addressing issues of how to utilise social media platforms to enhance and maintain brand image.

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# STRATEGY FORMULATION AND UNCERTAIN ENVIRONMENTS

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## ABSTRACT

*Business trends in markets that are in steady state environments are easier to predict. In the past, the business environments were a steady state market. However, market environments have changed to be dynamic, complex, and uncertain. Strategy formulation in dynamic, complex, and uncertain markets presents many challenges for companies. This paper examines the effect of uncertain environments on strategy and strategic planning and methods to reduce uncertainty. The paper found that scenario planning is a common approach but needs adapting depending on the level of uncertainty in the environment. Another approach is to use pseudoplanning, but this does not provide a solution to uncertainty in environments and thus does not lead to tangible competitive advantage.*

**Keywords:** pseudoplanning, scenario planning, strategy, strategy formulation and uncertainty

## INTRODUCTION

This paper investigates how the process of strategic planning operates in an environment that is uncertain and changing very rapidly. Business environments are never constant, but they could be slowly changing or moving rapidly. The issue is how to streamline the strategic planning process so that it is adaptable in uncertain environments and so that it becomes flexible and responsive as new environments operate. The objective of the literature review is to assimilate the literature required to develop insight into how the strategic planning process can evolve and develop to cope with uncertainty in the business environment. The literature suggests that strategic planning is related to the long-term direction of the company and that time horizons for strategic plans are in the range of 5–20 years. (Johnson and Scholes, 1993). Firms that implement a decentralised organisational structure are better able to respond to uncertain environments (Menon et al., 1996; Govindarajan, 1986). Furthermore, Menon et al. (1996) suggest that quality strategy formulation and implementation lead to superior performance. Moreover, formal strategic planning produces better organisational alignment and financial results (Armstrong, 1982; Ansoff, 1991). However, there is the suggestion that “plans” are put on a shelf and forgotten (Begun and Heatwole, 1999). Mintzberg (1994) suggests that two types of planners exist—the traditional planner and the creative planner—and their success will depend on the firm’s environment. *The literature concentrates on environments that are slowly changing, static, or stable; thus, there are deficiencies in the literature, but this gap is closing.* Consequently, the purpose of this study is to contribute to knowledge in the area of strategic planning and uncertainty in the business environment.

## Strategy and Strategy Formulation

Different approaches to the concept of strategy are proposed by Mintzberg and Quinn (1991), Sun Zi (1991), Hamel and Prahalad (1994), and Mintzberg, Ahlstrand, and Lampel (1998). The richness of the different approaches provides meaningful insights into the concepts of strategy. Mintzberg (“Crafting Strategy,” reprinted

in Mintzberg et al., 1991 refers to “crafting strategy”; strategy is a creative process that cannot be regimented (Mintzberg et al., 1991, p. 105). In the same paper, Mintzberg (1991) expands on his thoughts by explaining that strategies can “form” as well as be formulated, giving rise to the idea that strategy “emerges” in response to a given situation. Sun Zi’s (1991) ideas on strategy are based on successes on the battlefield. Modern practitioners of military strategy have applied these ideas to businesses. The approaches to strategy by Mintzberg (1991) and Sun Zi (1991) are very different. Sun Zi (1991) likens strategy to strict rules, whereas Mintzberg (1991) allows the rules to develop to meet the different situations. Hamel et al. (1994) compare strategy as an “intent.” This they call “strategic intent,” which is a unique view of the future. Thus, strategic intent differentiates by having the following attributes: discovery, direction, and destiny. Mintzberg et al. (1998) list 10 different views on the strategy process.

Porter (“How Competitive Forces Shape Strategy,” reprinted in Mintzberg et al., 1991) contends that strategy formulation is about dealing with the competition. Hamel et al. (1994) are in broad agreement with Porter. In order for companies to beat the competition, they must have “foresight” to determine where the future markets are (Hamel et al., 1994, p. 23). Porter’s (“How Competitive Forces Shape Strategy,” reprinted in Mintzberg et al., 1991) model is a static model of the existing competition, because it is based on trying to counter existing knowledge on the competition and market. Hamel et al. (1994) introduce the concept of looking forward in order to change the rules of the game. Hamel et al. (1994) are in broad agreement that strategy is about the competition, but Porter’s (“How Competitive Forces Shape Strategy,” reprinted in Mintzberg et al., 1991) model is focused on the present environment. The model of Hamel et al. (1994) is about trying to define the future.

Morgan (1997) compares the strategy-making process to a “brain” inside the “head.” The brain takes in the information from the changing environment to foster learning; from the different pieces of information, it builds the “big picture.” Lietka et al. (1996) refer to “strategic conversations” to design the future and further the intended strategy and also to prepare the ground for emergent strategy. Morgan (1997) likens strategy making to a “brain” that is the central control, but Lietka et al. (1996) take a different view that strategy making is to design the future and prepare the ground for emergent strategy. The concept of preparing the ground for emergent strategies is similar to the strategy of Mintzberg (reprinted in Mintzberg et al., 1991), who originated the concept of emergent strategies. Lietka et al. (1996), using the idea of strategy making as a design of the future, are in tune with the concept of Hamel et al. (1994) of “strategic intent.”

Andrew’s (1987) model facilitates agreement between stakeholders and also enables alignment between the internal and the external environments. Because senior management takes into consideration the views of stakeholders (employees and society), at least an attempt is made to facilitate agreement between the various stakeholders. Senior management will require information from external/internal consultants to provide responses to the questions in Andrew’s (1987) model. It is unreasonable to expect senior management to have an in-depth answer to the questions in Andrew’s (1987) model. Senior management will have the information to make informed decisions. The model is inclusive because it considers stakeholders (internal and external), although the decision making is under the control of senior management. It is a different approach from the traditional strategy making where only senior managers are included in the process (Westley, 1990). Andrew’s (1987) proposal that strategy making requires a consensus approach flies in the face of the traditional approach to strategy making that only senior managers are responsible for strategy making (Westley, 1990). Managers must also not see strategy in the traditional sense as a controlling device and must place more emphasis on partnership strategies (Stubbart, 1985). Partnership strategies require managers to be open-minded and cooperate with other managers to maximise results. In a “learning organization,” partnership strategies are more likely to occur. Senge (1997, p. 3) defines the “learning organization” as “where people continually expand their capacity to create the results they truly desire.” Stubbart (1985) and Liedkta et al. (1996) agree that strategy making is about developing partnership strategies. There is a suspicion that partnership strategies are more likely to be successful in learning organisations. Partnership strategies are likely to be more successful in learning organisations because the managers are receptive of new ideas and are not opposed to change. Cocks (2010) posits that strategic planning requires the integration of strategy formulation and strategy implementation and uses a project management approach in the deployment of the strategic plan. Fundamentally, strategy can be a basis for organisational learning and underpin and embed the approach of organisational learning (Mumford, 2000). Senior managers need to appreciate content, context, and processes of strategy (Moore, 1995).

## Competitive Advantage

Porter's ("How Competitive Forces Shape Strategy," reprinted in Mintzberg et al., 1991) five forces analysis is an approach for companies to determine the state of their industry from different perspectives; these are competitors, new entrants, buyers, suppliers, and the threat of substitution. An understanding of all of these different forces and how they interact will lead to companies gaining a competitive advantage. Mintzberg ("Generic Strategies," reprinted in Mintzberg et al., 1991) argues that he is completing the list of generic strategies (cost leadership, differentiation, and focus) devised by Porter ("How Competitive Forces Shape Strategy," reprinted in Mintzberg et al., 1991). The additional generic strategies by Mintzberg ("Developing Competitive Advantage," reprinted in Mintzberg et al., 1991) are locating the core business, distinguishing the core business, elaborating the core business, extending the core business, and reconceiving the core business. Mintzberg ("Developing Competitive Advantage," reprinted in Mintzberg et al., 1991) argues that Porter's ("How Competitive Forces Shape Strategy," reprinted in Mintzberg et al., 1991) list of generic strategies is limited, and he proposes five additional generic strategies. However, an analysis using Porter's ("How Competitive Forces Shape Strategy," reprinted in Mintzberg et al., 1991) model can lead to the generic strategies identified by Mintzberg ("Generic Strategies," reprinted in Mintzberg et al., 1991). Gilbert and Strebel ("Developing Competitive Advantage," reprinted in Mintzberg et al., 1991) point out that different industries offer different competitive opportunities and have identified three steps—industry definition, identification of possible competitive moves, and selecting among generic strategies. Ohmae (1982) states that business planning can be summarised as competitive advantage. His four business strategies of competitive advantage are key factors for success (KFS), relative superiority, aggressive initiatives, and strategic degrees of freedom. Hamel et al. (1994, p. 146) state, "Thus, we need a view of strategy as *stretch* as well as *fit*." Gilbert and Strebel ("Developing Competitive Advantage," reprinted in Mintzberg et al., 1991), Ohmae (1982), and Hamel et al. (1994) have different interpretations of strategy. Gilbert and Strebel ("Developing Competitive Advantage," reprinted in Mintzberg et al., 1991) and Ohmae (1982) appear to think of strategy as a static model, whereas Hamel et al. (1994) view strategy as a model that is static and dynamic at the same time.

Research in strategy has identified that organisational resources and capabilities are important and nonsubstitutable and are the basis of sustained competitive advantage (Barney, 1986 and 1991). The resource-based view suggests that human resource systems can assist sustained competitive advantage by facilitating the company's resources (Reed et al., 1990; Barney, 1992). Barney (1992) and Reed and DeFillippi (1990) agree that the resource-based view of strategy can lead to sustainable competitive advantage. Resources and capabilities are listed as distinctive competence (Reed et al., 1990) and core competence (Hamel et al., 1994). Lado and Wilson (1994) summarised that achieving sustainable competitive advantage through organisational resources is an ongoing process. Reed and DeFillippi (1990) and Hamel and Prahalad (1994) all agree that resources and organisational capabilities are a competence, but they call the competence by different names. A recent perspective on Porter's idea of competitive advantage is that companies make specific choices based on their value chain to shift relative costs or relative price in the companies' favour. This is a source of sustainable superior performance (Allio and Fahey, 2012).

## Strategy and Uncertainty

Strategic management aids organisations in understanding the impact of uncertainty in shaping the competitive environment, and it is to meet the competitive challenge (Allaire and Firsirotu, 1989; Porter, 1980). Strategic formulation is a reaction to perceived uncertainties in the competitive environment that require strategic action (Parnell, Lester, and Menefee, 2000). Parnell, Lester, and Menefee (2000) also suggest that competitive uncertainty is not a predictor of the generic strategy because information to develop the strategy requires time before strategic development can take place, but also, they are limited by the firm's capability and react to change based on their customers' needs (Parnell, Lester, and Menefee, 2000; Snow, 1978).

Mercer (2001) suggests that uncertainty can be classified into hidden uncertainties, expected outcomes, and random uncertainties, with the largest group being the expected outcomes. Hidden uncertainties are associated with techniques such as futurology and the use of thorough environmental analysis. Expected outcomes are from social decisions made by government or economic interactions and can be "pseudoquantified." Random uncertainties are unfathomable, but there are relatively few of them. Strategic

management is most fruitful in solving expected outcomes. Long-range planning is generally accepted as the approach to tackle hidden uncertainties and corporate strategy to solve expected outcomes as these tend to be short term. Strategic management can prepare for random uncertainties and can be likened to the use of insurance. Khalifa (2008) suggests that an approach to uncertainty is the “strategic frame,” which comprises the four Es: “exerting and leveraging,” “extending and renewing,” “exploiting,” and “exploring.” The “strategic frame” brings critical issues to the attention of senior management, by combing all the sources of competitive advantage. Risk management and uncertain management are closely related by drawing on propositions defined by Ojiako (2012); links between strategy and uncertainty are established—namely, intelligence reduces complexity within strategic risk management; dealing with strategic risk organisation must focus on a small number of trained individuals who cope with constant evolution, and flexible structures are in place to support them so that they can respond to risks in a near-random way that their competitors are unlikely to predict; innovation is spurred by encouraging new entrants; strategic risk is important for survival, and that is why firms and the military focus on it; the business has a lot to learn from the military; and the operational strength is the area in the firm to formulate competitive advantage. A focus strategy appears to be more important to a high-performing firm’s success, but this does not have to be in conjunction with a differentiation or cost leadership strategy (Parnell et al., 2012). Flexibility and simpler organisational structures are key areas of differentiation for small firms in dynamic environments, thus leading to differential competitive advantage. Small firms find it easier to adjust to technological change by managing the disruptive change in a timely manner (Didonet et al., 2012). Strategy should be seen as a dynamic organisational continuous process that requires new rules that are capable of creating ongoing dialogue and not the preservation of top management (Guttman and Hawkes, 2004). Strategic engagement is a driver for reducing uncertainty and should be across the organisation and not the preservation of specially trained individuals (Ojiako, 2012; Guttman and Hawkes, 2004).

## Strategy and Environmental Uncertainty

Uncertainty does not appear to have a standard definition, but many definitions are given in the literature (Sutcliffe and Zaheer, 1998). A lack of information is associated with uncertainty, and there is a lack of understanding on how to respond to environmental challenges (Spender, 1986). The other perspective of uncertainty is based on a lack of knowledge at various levels and poor cognitive analysis (Van der Heijden, 1996).

Miles and Snow (1978) classify the behaviour of the strategic relationship with the organisation based on three topology prospectors, defenders, and analysers. Prospectors assume that the environment is uncertain and dynamic, which requires a flexible approach to strategy making. From the defender perspective, the environment is stable and predictable. Thus, less agility is required by the organisation. Analysers are opportunistic and assume that the environment has a combination of stability to capitalise on opportunities and that uncertainty exists, which requires flexibility. Developing a multistrategy will give a stronger business performance over the long run (White, 1966; Wright, 1987). Parnell et al. (2012) found that SMEs that follow a multistrategy approach produced stronger business results. The results were based on Porter’s generic strategies, and the most effective business performance is based on a multistrategy of cost leadership, differentiation, and niche and supports White (1966) and Wright’s (1987) proposition. A word of caution, and that is that Miles and Snow’s (1978) topologies fit with large corporations and Porter’s generic strategies were applied to SMEs. Ghobadian and O’Regan (2006) contend that the literature states that there are differences in strategic behaviour between SMEs and large corporations.

Information that is reliable and relevant coupled with certainty enhances business performance (Ashmore, 1992). Top management and middle management are important actors in business performance (Wright et al., 1990), but Barney (1986) suggests that strategy formulation and plan implementation inputs come from a range of top and middle management positions across the organisation. Organisations that are analysers and defenders exhibited competitive action and the greatest confidence in the environment. Defenders focus on a subsegment of the environment and have the necessary organisational structure (bureaucratic and mechanistic) to support this topology (McCabe, 1990). Analysers, on the other hand, have low uncertainty about the environment (Miles and Snow, 1986). Prospectors are looking for opportunities based on the Ansoff matrix and are less certain about the environment and implement organisational structures that are loose and flexible (McCabe, 1990). Strategy formulation is, to a degree, a response to uncertainty in the environment. The level of

success of the strategy is dependent on the ability of the managers more so than resources and the level of competitiveness (Parnell, Lester, and Menefee, 2000).

The purpose of strategy formulation is to link internal competencies with the external environment. However, it is not possible to predict the future performance of the environment especially where it is uncertain, and managers need to make the appropriate strategic decisions. This will require approaches to limit uncertainty (Johnson, Gilmore, and Carson, 2008).

## **Reduction in Risk and Uncertainty**

Leavy (2007) suggests that there is no such thing as failure for large organisations, but mediocrity. This implies that they somehow manage the risks inherent in the environment to reduce the effects of failure. It further suggests that successful or mediocre organisations have the ability to minimise risk. Leavy's (2007) approach to uncertainty is adaptability with clear roles and responsibilities in the strategy process. Where organisations face a range of possible future outcome scenarios, those future outcomes need to be developed. These outcomes need to be limited in number and are distinct and, second, identify scenarios that probably account for all the likely scenarios for the future environment (Carbonara and Caiazza, 2010). Proactive firms use strategy to understand uncertainty and integrate external and internal information (Dvir et al., 1993; Carbonara and Caiazza, 2010). This implies that the strategy process is also proactive (Dyson et al., 2007). The firm's reaction to and perception of uncertainty can be characterised as an opportunity (Barr and Glynn, 2004). Courtney (2003) states that there are different scenario approaches, namely, "vision driven" and "decision driven." The vision-driven scenarios are used by senior management to articulate the future and "think outside the box." However, decision-driven scenarios are applied on deciding on the best strategic choice in environments that suffer from uncertainty. Furthermore, decision-driven scenarios are hierarchical (four levels), and the complexity of the scenario will vary according to the level of uncertainty, with level 4 making decision on future outcomes that are unknown and unknowable. Practicing strategies is achieved by testing the strategy using strategic models, a balance scorecard, and the application of robust testing before implementation (O'Brien and Dyson, 2007). To practice the strategies, uncontrollable events should be captured using scenario planning and simulation (Schoemaker, 1993; Kunc and Morecroft, 2007). In order to minimise risk in a financial crisis, firms focus on financial metrics at the expense of nonfinancial metrics. Firms also focus on stakeholders, especially suppliers and customers, more in a crisis. Interestingly, innovation strategy maintained its importance even in a crisis (Kunc and Bhandari, 2011). Traditional scenario planning is based on static strategy and does not clearly identify the risks. To overcome this problem, a dynamic decision-making approach is required. Projects are considered to be a series of adjustable decisions that change and influence managers' expectation on budgeting and planning. Consequently, with dynamic decision making, contingencies can have an entrepreneurial flair when responding to uncertainty (Arms, Wiecher, and Kleiderman, 2012). Bowen (2002) suggests that organisations may reduce uncertainty by using pseudoplanning. This is the appearance, through the existence of a formal corporate planning system, that corporate planning is taking place. Underlying pseudoplanning is the relegation of strategic planning to extrapolation of numbers and events, and it assumes that a linear relationship exists over the planning horizon. By adopting a pseudoplanning approach, the company has a semblance of strategic planning even if, in practice, this is not the case.

## **Decision Making and Organisational Effectiveness**

Gottlieb and Sanzgiri (1996) posit that companies have to solve the conflict between business needs and ethical behaviour, but they often find it difficult to resolve. They go on to define three key dimensions of ethical decision making: leaders who have integrity and social conscience, organisational cultures that foster dialogue, and dissent organisations that are willing to reflect on and learn from their actions. Gottlieb and Sanzgiri (1996) also suggest that a constantly changing environment, where "time to market" is essential for competitive advantage, does not allow organisations to reflect on or think about the next action. Argyris (1982) would say they are not "double-loop learning." Double-loop learning is a model or process to enable organisations to learn what designs or decisions they should choose. Gottlieb and Sanzgiri (1996) argue that in uncertain environments, companies do not have the time to think strategically. Argyris (1982) calls the ability to think strategically "double-loop learning"; companies are not able to reflect on their strategy. The assertion by Gottlieb and Sanzgiri (1996) that in uncertain markets companies do not have time to think is questionable. Companies that



only concentrate on immediate changes to their market are not able to define future products and technologies. These companies are not exhibiting strategic behaviourism. Then the issue becomes where the definition of future products and technologies is going to come from. This function is not suitable to go to a third party, as this would be equivalent to giving away the “crown jewels.” Clearly, the management must ensure that product and technology strategic planning remains in the company because these are core competencies.

Quality of plan includes formulation and implementation of the plan (Menon et al., 1996). Their research also supports the hypothesis that decentralisation is a suitable approach to handle environmental uncertainty (Govindarajan [1986] also reaches this conclusion). Another point made in this paper by the authors is that quality strategy formulation and implementation lead to superior market performance (Menon et al., 1996).

Liedtka and Rosenblum (1996) have found that decision making must be shared if the entrepreneurial spirit is to flourish. Briggs and Keogh (1999) are of the opinion that effective strategic decision making must first identify the mission and the vision, and these must be transmitted to the stakeholders. The stakeholders must also be allowed to contribute to the decision-making process. Liedtka and Rosenblum (1996) and Briggs and Keogh (1999) agree that decision making should be shared if it is to be effective.

Wright and Snell (1998) express the view that even a single business unit, operating in a dynamic and uncertain environment, cannot have decision makers with all the knowledge required to make perfect decisions. Bryson (1988, p. 74) supports a formal planning process and suggests that key decision makers rarely have time to discuss what is “truly important.” Wright and Snell (1998) take the view that even a single business unit operating in a dynamic and uncertain environment cannot have all the required knowledge to make decisions. Bryson (1988) is of the opinion that decision makers do not have the time to make the important (strategic) decisions. The external market defines the strategy and not the company. There is a suspicion that both views are correct. Wright and Snell (1998) and Bryson (1988) all agree that decision makers need assistance when it comes to important decisions.

Although decision makers attend board meetings and staff meetings, they normally discuss “relatively trivial matters.” Maranville (1999) suggests that the “trivial” meeting may be the organisation’s way of strategy formulation and implementation. This is a broad conclusion by Maranville (1999) and is probably not applicable to most organisations. Bryson (1994) explains that the political approach to decision making is more important to nonprofit organisations compared with for-profit corporations. A major feature of the political approach to decision making is the ongoing tension between the formal and the informal processes in the organisation. Maranville (1999) implies that “relatively trivial matters” occupy important decision-making time. Bryson (1994) holds the view that political decision making is how senior management makes decisions. Suppose Maranville’s (1999) hypothesis is true. What are the implications? The judgment of senior management is questionable. If senior management cannot identify the pressing problems for the organisation, then it is only a matter of time before something serious happens. Is senior management so inept? Maranville (1999) exaggerates the incompetence of senior managers. Bryson (1994) claims that the political approach to decision making is more important to nonprofit organisations. The senior management in publicly quoted companies is just as likely to use political processes to make decisions because they have to make decisions that involve the interests of the shareholders and the company’s employees. It is possible that the interests of the shareholders and the employees conflict. In a sense, Bryson (1994) is correct, because nonprofit companies that are government sponsored or rely on government funding must have well-developed political skills.

Employee participation in strategic planning gives employees a sense of importance and belonging. The process of engaging all employees in the strategic planning process has improved organisational effectiveness (Tonnessen et al., 1999).

Drury (1996) suggests that employees’ participation in the budgeting process should be selective. Employee participation in all aspects of the budgeting process is not always effective. Managers in decentralised organisations perceived themselves as having more influence, as participating more in budget planning, and as being more satisfied with activities associated with budgeting than counterparts in centralised organisations (Drury, 1996). Arnstein (1969) refers to a typology of participation and “nonparticipation.” The bottom two rungs of the typology describe “no participation.” Rungs 3 and 4 progress to “tokenism,” and rung 5 is a higher

form of tokenism and is referred to as “placation.” Further up the typology are increasing degrees of decision-making authority. Rung 6 is the “partnership” level in the typology, enabling communities to “negotiate and engage in trade-offs with traditional powerholders.” At the topmost rungs, “delegated power” (rung 7) and “citizen control” (rung 8) are defined as “have-not citizens obtain the majority of decision-making seats, or full managerial power” (Arnstein, 1969, p. 217). The model assumes that participation and no participation can be divided into eight separate rungs. In reality, the divisions are not as distinct, and many other rungs of the topology might exist. Heeks (1999, p6) suggests that three key questions must be asked where participation is being considered.

1. What is the political and cultural context?
2. Who wants to introduce participation, and why?
3. Whom is participation sought from? Do they want to, and can they, participate?

According to Eisenstat (1996), position in an organisation can improve organisational effectiveness. This is different from Heeks (1999), who suggests that culture and willingness to participate contribute to organisational effectiveness. Tonnessen and Gjefsen (1999) note the view that employee participation in strategic planning gives all employees a sense of importance. Eienstat (1996) argues that human resources’ unique partnership with the organisation maximises the effectiveness of employee participation. Is it true that human resources have a unique relationship with all employees? Human resources have a unique relationship with employees because of their function and position in the organisation. There is no guarantee that human resources can leverage their unique relationship with all employees to improve corporate effectiveness. Human resources are generally not a department held in high esteem by employees. Of course, there is also the issue of whether mass employee participation in strategic planning is beneficial to the organisation, and it could be the case of too many cooks. Similar issues arise with the consensus approach to strategy making. Armstrong (1982) and Ansoff (1991) provide evidence to support the assertion that formal strategic planning produces better organisational alignment and financial results. An ad hoc approach to strategic planning is likely to lead to chaos. Lam and Schaubroeck (1998) argue that a formal planning process is required to manage all the interactions effectively. Armstrong (1982), Lam and Schaubroeck (1998), and Ansoff (1991) all agree that a formal strategic planning process is beneficial to an organisation. This appears to be a sensible view. For an organisation to generate a higher rate of return, the strategic planning decision should include the political and enforced strategy modes and in equal measure. However, it assumes that the organisation has an accurate understanding of the external environment based on monitoring and scanning that underpins the enforced strategy (Gunby Jr., 2009).

## **PLAN IMPLEMENTATION**

If little attention is given to the implementation of the plan, it is not as effective as it should be. All of the key players (senior management) must be committed and dedicated to the implementation of strategies (Begun et al., 1999). Researchers have expressed that too much effort is placed on the development of the plan and strategies and not enough on implementation and monitoring. The plan is an end in itself (Abell, 1993; Curtis, 1994). Begun and Heatwole (1999), Abell (1993), and Curtis (1994) all agree that the implementation of the plan is important, and not enough resources are committed to this stage of the planning cycle. Begun and Heatwole (1999) argue that all too often, the “plan” is put on a shelf and forgotten. In addition, the feedback loop in the strategic cycle is only closed when implementation strategies are continually evaluated. When employees participate in the strategy process, it builds ownership and makes implementation easier (Tonnessen et al., 1999). Begun and Heatwole (1999) and Tonnessen and Gjetsen (1999) agree that the plan is not complete until it has an implementation plan. Tonnessen and Gjetsen (1999) further speculate that employee participation will make the plan implementation easier. What they do not state is whether all the employees would make the same contribution. It is difficult to understand how all employees could participate in the plan without weakening the overall thrust of the plan. Heeks (1999) argues that before participation can be used, the political and cultural context of the organisation must be considered. Other considerations include who wants to introduce participation and why, whom is participation sought from, and do they want to, and can they, participate. Tonnessen and Gjetsen (1999) have taken a naive approach to participation.

Poister and Streib (1999) posit that strategic management must assist in the implementation of strategies through vehicles such as action plans, the budgeting process, the performance management system, changes in

organisational structure, and program and project management. Furthermore, strategic management must assign implementation responsibilities to specific strategic business units or individuals, and a process should be in place to measure the organisation's success or failure against the strategic objectives. Dimma (1985) takes a slightly different view on the importance of plan implementation. To Dimma (1985), the formulation of strategy and its implementation are of equal importance. He also disagrees with plan time horizons beyond the limit of the environment or the nature of the business. Monitoring of the "fit" between the organisation and its environment and watching external trends are all functions of strategic management (Poister and Streib, 1999). Poister and Streib (1999) claim that implementation strategies work better when strategic management is effective, and responsibility for the implementation of the plan is assigned to a person in the organisation. Dimma (1985) considers strategy and plan implementation to be of equal importance. There is a strong suspicion that unless the plan implementation is elevated in importance to strategy making, this will always be the poor relation. Effective strategy implementation requires a project management approach whereby people and resource issues are at the head of the agenda at review meetings. If the plan is clear and communicated, then the allocation of people is the next step in line with the roles and skills required. However, if the execution is still failing, then either the resources are inadequate or the wrong people have been allocated (Cocks, 2010).

## CONCLUSIONS

This paper argues that even in uncertain, complex, and fast-moving environments, there is a need for sensible planning based on a strategic planning process. Scenario planning is a common method to de-risk the uncertainty in business environments, but it will need adapting depending on the level of uncertainty. In uncertain environments, strategic plan implementation is even more acute, and one suggestion is to adopt a project management style for the execution. People and resources are key to plan implementation and should always be paramount in the strategic implementation plan process. Organisations that do not apply scenario planning to reduce the level of uncertainty appear to adopt a semblance of following a strategy formulation process that does not attempt to build future scenario outcomes and thus are not linked to the business environment. This approach to dealing with uncertainty is known as pseudoplanning and relegates strategic formulation to a totally mechanical process with limited decision making.

## SUGGESTIONS FOR FURTHER RESEARCH

Some industries are more adept at using scenario planning, and if so, a best practice to the application would be appropriate. Another area that needs further investigation is the application of project management techniques to the strategic planning process. However, can these techniques be used "off the shelf," or is adaptation required to hone them to the strategic planning and implementation processes? Does an approach to uncertainty linked to the idea of pseudoplanning have mileage in strategic formulation?

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# **EXPLORING THE INFLUENCE OF THE 7Ps OF INTERNAL MARKETING ON THE 4 DIMENSIONS OF SERVICE QUALITY AT A SOUTH AFRICAN STAFFING BRAND**

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## **ABSTRACT**

*The main purpose of the study on which this paper is based, was to determine the influence of internal marketing on service quality of staffing agencies. The population of the study was the public staffing industry in South Africa. The sampling unit was the clients of a selected staffing brand. The selected sample of respondents was surveyed through two online self-administered surveys distributed via a link in an email. The data was analysed using multivariate regression statistics. The application of an internal marketing approach enables staffing agencies to minimise employee turnover and increase service quality and performance that result in higher levels of competitiveness and profitability. Successful internal marketing should have a positive influence on employee attitudes and actions and therefore enhance customer satisfaction and service quality. The integration of internal marketing into the organisation's overall marketing strategy is therefore critical. The purpose of such a strategy can be to ensure that the organisation recruit and train employees to deliver on the values of the organisation in order to ensure that staffing agencies enhance their level of service quality.*

*Keywords:* Internal marketing, service quality, staffing agency, employees, clients

## **INTRODUCTION**

It is vital for predominantly service-oriented organisations to consider the possible connection between internal marketing and the service quality of the organisation. It is additionally important to remember that the function of internal marketing is to improve external marketing transactions, otherwise such a strategy should not be considered (ELSamen & Alshurideh, 2012:87). Through establishing, implementing and managing a customer-conscious service culture, strategy and relationships, which is the goal of internal marketing, higher levels of service quality can be achieved (Chen & Shinyi, 2013:100). It is important to consider this connection within staffing agencies as staffing agencies have various obstacles that need to be overcome. These include high employee turnover, particularly amongst recruitment consultants who are the main client-facing employees (Meszaros, 2009). High employee turnover may be due to employee empowerment problems. Employee empowerment problems may stem from communication or training problems within staffing agencies (Azizi, Ghytasivand & Fakharmanesh, 2012:124). Communication or training problems could lead to low staff motivation and job stress due to staff not knowing how to perform their jobs efficiently. Low employee motivation may result in lower levels of service quality given by the employee to the client (Bowers & Martin, 2007:88).



In terms of focusing on service businesses, staffing agencies are highly underresearched considering the various obstacles they face. Essentially, staffing agencies provide the service of matching candidates to their clients' human resource needs and organisational culture (Thomas, 2009). The demand for staffing agencies has evolved beyond connecting the correct people in positions that fit their skills, to that of partnering with clients to provide the correct talent mix for their business (Czakan, 2009). Van Vuuren (2011:13-14) refers to a service as "any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product". Therefore it would be fair to stipulate that a staffing agency's clients are continuously exposed to the agency's services, which includes its service promises, and the employees who deliver, or in some cases don't deliver on these promises (Biedenbach & Marell, 2010:447). According to the Association of Personnel Service Organisations (APSO) (2012) there is a lack of research available concerning staffing agencies. This lack of research could be due to multiple reasons including a lack of regulation that pushes for the collation of stats and information, a general lack of resources, and the common disinclination of members within staffing agencies to offer information to those attempting to conduct research. Due to increased globalisation, South African organisations have competition both locally and on a global level, and therefore need to empower themselves with a wealth of information in order to compete with First World nations (Meszaros, 2009).

Against this background, formal research is currently of great importance for staffing agencies as it still seems to be unclear whether internal marketing changes do in fact influence the level of service quality being delivered to clients. In order to address the aspects highlighted, this paper includes a literature review of internal marketing and service quality as related to a prominent staffing agency in South Africa. The problem investigated in the study that informed this paper is specified, followed by a discussion on the research objectives, hypotheses and methodology employed. Thereafter, the empirical results are discussed, followed by a discussion of the implications they might hold for management.

## **PROBLEM STATEMENT**

An important focus of internal marketing should be to improve the service quality levels of the employees of an organisation. Improved service quality results in improved service satisfaction levels amongst clients (Matanda & Ndubisi, 2013:1036; Otubanjo & Melewar, 2007:421). However, no studies were found on how the elements of the internal marketing mix of product, price, promotion, distribution, people, processes and physical evidence, influence service levels of staffing agencies. This raises the question as to whether or not internal marketing has a positive influence on the service quality levels of staffing agencies amongst their clients. From the literature it is evident that there is a lack of information on the relationship between the internal marketing mix and the dimensions of service quality. Furthermore, the influence of the elements of internal marketing on the dimensions of service quality (reliability, responsiveness, assurance and empathy) has not been explored before. In this paper this relationship is explored as it could provide a means of reducing employee turnover and enhancing the performance and profitability of staffing agencies.

The problem statement therefore is:

The relationship between the elements of internal marketing and the dimensions of service quality among staffing agencies tends to be unexplored.

## **OBJECTIVE**

The primary objective of the study is to determine the influence of internal marketing on the dimensions of service quality at a selected South African staffing brand.

## **LITERATURE REVIEW**

Modern day organisations are progressively finding that in order to remain competitive, they require the most talented employees available on the market and therefore they are required to satisfy two kinds of consumer markets; the internal customer and the external client (Palmer, 2005:441). Therefore the need for an internal

market orientation has been recognised. Having an internal market orientation involves an organisation's management having a commitment towards its employees and the fulfilment of their needs (Gounaris, 2008a:72). The underlying principle of internal marketing is that effective service delivery requires motivated and client-conscious employees (Keelson, 2014:4). Therefore, if a staffing agency utilises marketing tactics such as the marketing mix of product, price, promotion, distribution, people, processes and physical evidence within the organisation rather than only outside the organisation, it could contribute towards fulfilling the needs of employees better, thereby creating employees who are passionate and motivated to provide high levels of service to clients (Meszaros, 2009). This is due to the fact that satisfied employees have been linked to satisfied clients as they tend to be happier and have higher levels of loyalty towards the organisation, which contributes to their delivering higher levels of service quality (Barzoki & Ghujali, 2013:34-35).

The most significant issue influencing the modern-day service sector is the ever-rising expectations for superior and more consistent degrees of service quality than were provided before (Vrontis, Thrassou & Zin, 2010:22). To understand client satisfaction, requires the consideration of what clients expect in terms of service delivery and to what extent these expectations are fulfilled by the staffing agency. It is important to value employees since they deliver a service to the client and are primarily responsible for fulfilling the rising expectations of the client (Zeithaml, Bitner & Gremler, 2006:26, 81). It can therefore be considered essential that organisations seek a method to engage their employees to believe they're supported and valued, as this will translate into better service quality levels and a reduction in employee turnover, leading to confident productive employees, which in turn translates into commercial benefits and success (Yang, 2011:273).

According to Vella, Gountas and Walker (2009:408), successful internal marketing should produce positive relationships between employee attitudes and actions and higher customer satisfaction and service quality. The practice of marketing management needs to combine internal marketing with effective human resource policies in order to attract and retain the best possible employees and to encourage them to provide superior quality service. Internal marketing is too important to be handled by the human resource department in isolation. It is critical that internal marketing is integrated into the organisation's overall marketing strategy to ensure the organisation hires and trains employees to deliver on the values of the brand. A service organisation, such as a staffing agency's strategic advantage frequently exists in its ability to streamline and connect the organisation's capabilities to design a set of seamless service procedures that are perceived as better than its competitors (Meszaros, 2009). This is particularly critical with service businesses due to their intangibility, inseparability, heterogeneity and simultaneous production and consumption of services. Through aligning all processes and employees with the overall marketing objectives set out by an organisation's management and an organisation's clients' needs, an organisation can create a difficulty to duplicate strategic advantage which is critical in the success of any sustainable business (Chang & Chang, 2008:93-94).

Against the literature background provided, the following hypothesis is formulated:

There is a significant difference between the perceived influence of the different elements of internal marketing and the dimensions of service quality at a selected South African staffing brand.

## **RESEARCH METHODOLOGY**

The study was quantitative in nature and descriptive in design. A quantitative approach was followed in order to produce clear data results that are easily generalised and statistically calculated (Malhotra, 2010: 42). This study also applied a descriptive research design, the reason being that descriptive studies usually accommodate large sample sizes and make use of survey and questionnaire techniques to gather the necessary data required by a specific study (Easwaran & Singh, 2010: 77). The target population for this study was drawn from all registered staffing agencies listed under the Association of Personnel Services Organisations (APSO). Public staffing agencies registered with the Johannesburg Securities Exchange (JSE) were considered since they are the largest in size and income, most regulated, and among the more sustainable staffing agencies within South Africa. Non-probability sampling in the form of judgement sampling was used to select public staffing agencies registered with the JSE. The sampling units for the sample frame were all the current clients of the staffing agency divisions and subsidiaries within the selected staffing group. A total of 1 123 questionnaires were completed. An online self-administered survey was used to collect data from respondents. Online survey methods allow for no

interviewer bias and for data to be gained quickly, from a large sample, and at a relatively low cost (Churchill & Brown, 2007:114). Structured questions were used to elicit responses. The questionnaire was prepared in an electronic format and consisted of four sections. Section A was in the form of fixed-alternative questions to obtain demographic descriptions of the respondents of the study. Sections B, C and D were in the format of a five-point Likert scale. The statements' response continuum ranged from 1-5, where 1 = strongly agree to 5 = strongly disagree. Section B covered aspects pertaining to the seven elements of internal marketing, and section C contained aspects pertaining to the four dimensions of service quality. Section D contained aspects pertaining to brand image theory. Suitable scale items were developed from the literature. The questionnaire was pretested before it was fielded among the target population of the study. The data on the questionnaires was coded, entered and edited for analysis using the Statistical Package for Social Sciences (SPSS version 18). The data analysis firstly involved the examination of the frequency distribution of the results for each of the scale items included so as to determine whether the data was normally distributed. The normality of the distribution of results of each scale item was determined in order to determine whether parametric or non-parametric tests should be used to test the hypotheses formulated for the study. The distribution of results can be considered normal if it exhibits a skewness of less than an absolute value of 2.00 and a kurtosis of the distribution of less than 7.00 (Field, 2009:127). All scale items used fell within these parameters. Based on this fact and the fact that the sample size was large ( $n = 1123$ ), parametric tests were considered suitable for hypotheses testing. Multivariate regression analysis was used to determine the perceived relationship between the elements of internal marketing and the dimensions of service quality for the staffing agency group in the study.

## RESULTS

### Construct validity

The Kaiser-Meyer-Olkin (KMO) statistics ranged between being average (KMO = 0.603) to great (KMO = 0.888). The Bartlett test of sphericity had p-values all equal to 0, indicating that the values were significant ( $p < 0.05$ ) for the factors created from the questionnaire. Most of the cumulative percentages ranged between 52% and 88% and were therefore considered to explain a sizable amount of the variance.

### Reliability

Cronbach alpha values for the sample in the study ranged between highly reliable (the values were between 0.8 and 0.95) concerning some constructs to fairly reliable (the values were between 0.6 and 0.7) following Zikmund and Babin (2007: 322). Except for the construct Internal Processes, all constructs were found to be reliable (no values were below 0.6), as indicated in Table 1. However, the results of the KMO statistic observed in the factor analysis found the factor of reliability to be weak, and therefore this factor was not used in the statistical analysis in the study. Therefore it is also not included in Table 1.

**Table 1: Cronbach alpha values**

Construct	Sub-construct	Cronbach alpha ( $\alpha$ )
Internal marketing	Internal product (6 items)	0.927
	Internal price (8 items)	0.668
	Internal distribution (2 items)	0.728
	Internal promotion (8 items)	0.825
	People (5 items)	0.609
	Physical evidence (4 items)	0.816
Service quality	Responsiveness (5 items)	0.900
	Assurance (5 items)	0.858
	Empathy (5 items)	0.930

### Multivariate regression results

The multivariate F-test, which is based on a statistic called Wilke's Lambda explains whether or not the independent variable explains significant variation among the dependent elements within the study. Eta-squared plays a similar role to R<sup>2</sup> as it acts to define the strength of association or depicts the proportion of total variation attributable to an element and ranges from 0-1. Both the Wilke's Lambda and the partial Eta-squared are discussed in this section to explain the results.

**Table 2: Multivariate regression for four dependent elements of service quality and seven independent elements of internal marketing**

<b>Sample</b>		
<b>Independent elements</b>	Wilke's Lambda Sig (p)	Wilke's Lambda Partial $\eta^2$
<b>Internal product</b>	.000	.199
<b>Internal price</b>	.000	.050
<b>Internal promotion</b>	.008	.024
<b>Internal distribution</b>	.000	.100
<b>People</b>	.002	.030
<b>Physical evidence</b>	.000	.061

The data displayed in Table 2 shows that all elements of internal marketing were found to be statistically significant ( $p\text{-value} < 0.05$ ) for influencing service quality in the sample. Internal product showed the strongest variation to service quality ( $\eta^2 = .199$ ), followed by internal distribution ( $\eta^2 = .100$ ) and then the physical evidence ( $\eta^2 = .061$ ) for the sample in the study. The internal promotion was considered the least influential ( $\eta^2 = .024$ ), followed by people ( $\eta^2 = .030$ ) and the internal price ( $\eta^2 = .050$ ). However, since partial Eta-squared is reported on in a similar way to  $R^2$  it can be noted that the internal product only influences service quality by 19.9%, the internal distribution only influences service quality by 10% and the physical evidence only influences service quality by 6%. Based on the partial Eta-squared values observed for the data in Table 2, the following finding was considered:

**Clients perceived service quality to be most influenced by internal marketing through the internal product.**

The finding tends to be consistent with the literature which identified that through providing internal products that meet employee needs, the staffing agency would have more satisfied employees with longer tenures. The organisation thus does well. The more involved and connected employees feel in their job, the more job satisfaction they will experience which should create higher levels of loyalty towards the organisation. Employee loyalty allows for employees to believe in the values and goals of the organisation, motivates them to put more effort into their jobs, and gets employees to remain with the organisation for longer periods of time. Based on the multivariate regression findings stated, the hypothesis 1 is accepted.

## MANAGERIAL IMPLICATIONS

From an internal marketing perspective, staffing agencies should ensure that the internal product that they offer to potential and existing employees creates employee satisfaction and loyalty. This should create a workforce of employees who have longer tenures and more knowledge in staffing, leading to higher levels of service quality, and it can be achieved through effective training and by offering employees careers that will enable them to grow and enhance their skills. Therefore, jobs or internal products should be designed for different employee segments, based on their different needs and competencies. Clients seemed to find the internal distribution element of internal marketing to be relatively influential towards the responsiveness, assurance and empathy dimensions of service quality. To ensure that service quality matches client requirements, employees must be flexible and responsive to client needs in order to satisfy them. The internal marketing concept emphasises that teamwork between the employees of a business is a key factor in the development and application of a successful business strategy. Teamwork is required for effective knowledge renewal, as information is shared across the business which allows for new ideas to form and for the culture of the organisation to be maintained.

Physical evidence was found to be relatively influential towards the assurance and empathy dimensions of service quality. Therefore it is important that staffing agencies ensure that they have a modern environment and attractive marketing brochures, so that clients will be assured that the staffing agency is a market-leading and innovative staffing provider. A staffing agency's physical environment, design and layout may have an

influence on employee behaviour. Therefore, staffing agencies should consider designing the physical layout of their organisations around employee needs in order to maximise both productivity and employee satisfaction. Staffing agencies need to implement open-plan office designs in order to ensure a more collaborative work environment where staff can react to change quickly. Furthermore, due to many of the interactions between a staffing agency and the client taking place at the client's premises, it is essential that staffing agencies ensure that their employees follow a specific and professional dress code. This will allow the staffing agency to be perceived as professional and assure clients that they are receiving a high level of service quality.

Internal promotion was found to influence the responsiveness of the service, and therefore in order for staffing agencies to provide more responsive service to clients, they need to focus on their internal promotion tactics. Staffing organisations need to begin by segmenting their employees, based on the level of client interaction they have. This will allow the organisation to determine how much information needs to be communicated to each group of employees, and how frequently this should happen. Furthermore, staffing agencies can determine which types of communication methods would be most effective to reach certain employees, as many staffing agency employees often conduct services on the clients' premises and will therefore need to be well versed in different modes of communication. Staffing organisations should consider utilising various internal communication mechanisms such as internal advertising, personal selling, sales promotion, public relations and new media technologies in order to communicate activities, circulate knowledge, and create shared values amongst their employees. Many staffing agency employees frequently work out of their offices at the clients' premises; therefore special attention should be given to new media as this would allow employees to remain connected to the organisation, its communications and culture via virtual or online communities. New media is frequently used both externally and internally by modern-day organisations in the form of the intranet, social networking and wikis.

The key purpose of internal promotion is to inform, influence and remind employees about the services offered by the staffing agency. Furthermore, it aids in maintaining the culture of the organisation and contributes to change management, which allows the organisation to have a seamless flow of external and internal communications. This results in achieving shared understanding concerning clients and their needs. Employee knowledge is essential, since organisations that excel at satisfying clients usually make it a priority to keep employees informed about organisational objectives, strategies and client expectations. When a knowledgeable service employee leaves an organisation and is replaced by an employee who is learning processes and client interactions for the first time, some client dissatisfaction is expected to occur. Experienced and skilled employees are generally more productive and responsive than newly-recruited employees who still need to be trained. Therefore, when a staffing agency creates employee satisfaction, employees will be more likely to stay within the organisation and work towards higher levels of client satisfaction and profitability for the staffing agency.

Staffing agencies need to ensure that they offer consistent services, as this assures clients that they are working with a high quality staffing provider. The first level of internal marketing is that of maintaining consistency. Consistency can be achieved through attracting, hiring and training the correct type of employees to be consistent with the organisation's values. Creating a matrix-structured organisation and a social environment that allows for effective internal relationships between employees to be fostered, enables employees to provide high levels of internal service quality to each other. Service consistency can also be achieved by management providing effective scripted and technological processes that aid employees in understanding their work and doing it more effectively. Effective processes lead to better, more effective strategies, and subsequently to better, more consistent performance of a staffing agency. Through empowering and rewarding employees for performing their jobs correctly, staffing agencies are able to have higher levels of consistent service quality, as employees will be more productive and motivated to behave in accordance with the organisation's goals and values.

## CONCLUSION

This paper reported on research conducted on the influence of the elements of internal marketing on the dimensions of service quality, namely reliability, responsiveness, assurance and empathy within the staffing industry in South Africa. This relationship was explored as it is believed that it could provide a means to reducing employee turnover and enhancing the performance and profitability of staffing agencies. It was found

that internal marketing influences the superiority and consistency of the service quality provided by employees and experienced by clients.

## **LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH**

Only one selected staffing agency group was included within the study. Therefore, the information provided does not represent the entire industry. Further research regarding this topic could be extended to include other geographical areas and additional staffing agencies or service businesses.

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# MEDIATION IN BANKRUPTCY: THE BETTER MODEL FOR A REASONABLE SOLUTION?

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## ABSTRACT

*Bankruptcy, indebtedness, insolvency, are known words used in the current scenario of global crisis. All of these concepts correspond to situations of inability of debtors to pay their debts which, in consequence, have the potential to generate specific conflicts between debtors and creditors. In almost every legal system, out-of-court mechanisms are being established to face the specific characteristics of an insolvency situation. In this paper we intend to study the existing main out-of-court models of solving insolvency conflicts, to realize its advantages and disadvantages, in order to propose a model of a contractual insolvency procedure which secures the equality of the parties and their active and informed participation.*

**Keywords:** Bankruptcy, out-of-court procedures, insolvency mediation, mediator.

## INTRODUCTION

Litigation in the field of overindebtedness/insolvency/bankruptcy has some specific characteristics. On the one hand we can observe the existence of multiparty conflicts, which involve various creditors interested in the execution of the contracts and a debtor unable to accomplish that execution. This dichotomy reveals, on the other hand, the power imbalance between them, due to the clear financial and emotional weakness of the debtor. One could think that the patrimonial nature of this kind of conflicts would exclude emotional questions or the presence of subjective interests of the parties. However, that is not true. Indeed, an insolvent debtor experiences a state of great distress when his or his family daily survival is at stake or, if we are referring to a company, when the debtor faces the loss of the business. But also the creditors are fighting to keep their financial stability, making their fears and doubts about the execution of the contracts worthy of consideration.

In order to face these specific characteristics of an insolvency situation, every legal system has been trying to come up with out-of-court solutions, since the available judicial processes usually lead to a long and hard path to reach a final decision, which usually has few or none practical effects. Additionally, both the principle of private autonomy and the principle of contractual freedom regained strength, specially because debtors and creditors are able to negotiate a debt restructuring or a payment plan, while providing for the debtor's economic recuperation, avoiding liquidation.

In countries where there aren't specific insolvency regulations, we can observe the proliferation of out-of-court procedures, based on direct negotiation between the parties, or with the intervention of a mediator/facilitator. The *London Approach* constitutes the paradigm and inspiration for these procedures. Nevertheless, nowadays, many countries adopt hybrid or mixed systems/procedures, like pre-packaged insolvency plans, which combine an out-of-court phase, followed by a judicial phase in order to enforce the deal. In any of these models/procedures, both the private autonomy and contractual freedom principles come into conflict with the need of giving both parties equality of arms. One only can admit the existence of a contractual insolvency procedure if equality and informed participation are guaranteed. When we talk about debtors with low school levels or not informed at all about the legal insolvency regime, to allow a direct negotiation between debtors and creditors is to lead to a high risk of tendentious deals, only granting protection to one of the parties.



In this context, we consider, therefore, fundamental, the existence of a mediation model/procedure, lead by a third neutral party – the mediator – whose intervention will reduce the inner power imbalance of these insolvency conflicts. On the other hand, the mediator will foster the total clarification of the parties and the negotiation of a balanced and fair deal, with respect for the equality principle. The search of a win-win agreement and the possibility of intervention, in the mediation procedure, of various individuals, are also strong arguments. But even when we defend mediation procedures, we have to ask which model is most adequate. Is it a model based on the prior intervention of a neutral evaluator, which presents a proposal to be discussed by the parties with the assistance of a mediator? Or, by the contrary, it is more important the prior intervention of the mediator to reinforce the power of the parties, mediator who will, for instance, study the concrete insolvency situation, identify the creditors and the financial capacity of the debtor, which allows a freely and clarified negotiation?

In this paper we will analyze the existent out-of-court procedures, as well as its advantages and disadvantages in overindebtedness/insolvency/bankruptcy procedures. We intend to build a model of a contractual insolvency procedure which secures the equality of the parties and their active and informed participation.

## **THE PRESENT AND FUTURE OF OUT-OF-COURT PROCEDURES**

The legislative models upon which traditionally insolvency procedures rely are divided between the primacy of the exclusive protection of creditors (by promoting liquidation), and the protection of other private or public interests (by promoting debtor's recuperation). The recent trends, based on the recognition that liquidation doesn't significantly satisfy creditors' rights, point to the necessity of creating quicker recuperation/recovery/restructuring procedures. These procedures would preferably be out-of-court procedures, since they are cheaper, avoid the wearing out of the parties and are quicker than the judicial ones <sup>(1)</sup>.

The international organizations, such as the European Commission<sup>(2)</sup>, the IMF<sup>(3)</sup> and the United Nations<sup>(4)</sup> have defended, in recent years, the expansion and implementation of such procedures, pointing out the need for protection of viable companies, on the one hand, and, on the other, of indebted consumers, in order to stop the degradation of their financial conditions and the appearance of a subsequent impoverishment situation. Also, these procedures will also avoid stigmatization of insolvents, and the social alarm generated by financial distress of companies, especially when these procedures aren't publicized.

Recovery/recuperation/restructuring procedures, in the context of insolvency law, can formally be divided in three types of procedures: judicial, hybrid and out-of-court. In more or less deviations, the main goal of these procedures is to reach a written agreement between creditors and debtors, which, depending on the type of debtor, will include moratoria, debt forgiveness and company restructuring, with or without new funding. These written agreements will be universal, since they allow the intervention of all the creditors in the negotiation, based on a set of ground rules or principles, as we can observe on the pioneer *London Approach* of the Bank of England, which established a set of non-binding principles to promote the recuperation of the viable companies not using judicial procedures (Frome, N., 2000). The main difference between all these procedures will be the more or less intervention of the courts - and for what is worth, the existence of a court sentence adds to legal certainty and to a more understandable willingness of the creditors to make a deal, also allowing, in case of breach of contract, to a quicker transition to liquidation.

The out-of-court procedures can also be divided in two groups: the workouts or out-of-court procedures *strictu sensu*<sup>(5)</sup>, where there is no intervention of courts, pointing out to the relevance of the mediator. On the other hand, there are second generation procedures, the hybrid ones. In this case we will have agreements with a final probate from the court, such as the pre-packs and the fast-track procedures, where the figure of a neutral third party, generally appointed by the court itself, has an important role, although with less powers than in the first generation procedures (Serra, C., 2012).

Independently of the type of out-of-court procedures, its importance, nowadays, is undeniable, since they contribute to a proper functioning of markets and to attack an insolvency situation at its very beginning,

especially when it comes to SME and consumers. But the way the law designs the procedure is also fundamental to its success and, one can state, the presence of a mediator increases the chance of success.

## The current out-of court procedures

In present days, out-of-court procedures can be found all over Europe, mainly hybrid procedures in the fast-track variant. In most of them, we can also find the mandatory presence of a third party, which aggregates the negotiations between the debtor and the creditors. These third parties can be public institutions or services, like the IAPMEI in Portugal, for corporate insolvencies, the *commissions de surendettement* in France, for insolvent consumers, the *commission de médiation* in Luxembourg, the *Schuldnerberatungsstelle*, in Germany, also for consumers, or individual mediators, like the *mediador concursal* in Spain, *conciliateur* in France, supervisor in the UK, *médiateur de dettes* in Belgium, for instance. Some of these procedures are now consolidated, but for the most part of European countries, especially in the East, reforms are being introduced in order to update insolvency regimes to achieve the newly European Commission goals. Also, in the USA, *Chapter 11* procedures, which served as inspiration for many of the European procedures, are also under revision.

As we stated above, the future of insolvency procedures cannot be parted from this evolution - more or less specialized, these procedures are cheaper, quicker, flexible and, hopefully, effective. The salvation of viable companies and the rescue of insolvent consumers, in this economy, are less and less compatible with long and expensive judicial procedures. But as we said, these procedures may differ.

The out-of-court pure model, like the workouts, consists mainly on negotiations that are made totally outside the courts, leaving to the debtor the obligation of selecting and contacting all of the creditors, in order to achieve the larger written agreement possible. In these kind of procedures, that may be legally established or not, the major risks are failing to contact all the creditors or failing to reach a full agreement, which only leads to a partial one. In this case, restructuring can be compromised, and the harassment of the creditors may not stop, but when fully successful, it is the ideal option. These workouts can rely on internal staff of the debtor, but the importance of a third party is insurmountable, specially for small companies and consumers, typically fragile in opposition to the main creditors (like banks, for example), bringing the common ground and experience to a good negotiation.

The hybrid procedures, whereas we are talking about a fast-track procedure, or a simple probate on the agreement, will have a mandatory intervention of the court. The structure is pretty the same as described for the workouts – the debtor tries to reach an agreement with the creditors, through a negotiation, based on a set of common principles. The difference is that, at the end, the court will have to analyze and approve the deal, with the greater advantage that the deal can be imposed to all the creditors, even the ones who didn't accepted or have taken part on the negotiations, provided that a certain majority of creditors (more than 50%, or two thirds, for example) accept the agreement. In this case, the importance of the mediator, appointed by the court, in most of the legal systems, is equally observed, since these procedures are the last hope of the debtor before liquidation. As we have seen, the sense of security that a court decision brings is a factor for the proliferation and popularity of this kind of procedures.

## THE INSOLVENCY MEDIATION

Given the current trend of desjudicialization of the insolvency processes, we place ourselves on the side of those who advocate the adoption of mediation as the extra-judicial mechanism to be applied when determining the payments plan to creditors or the debts restructuring in the context of an insolvency proceeding. Before justifying our choice, we must realize what mediation is. The definition of this mechanism is not an easy task due to its flexibility (Eidenmüller & Griffiths, 2008).

Segundo a Diretiva 2008/52/CE de 21 de maio, sobre certos aspetos da mediação civil e comercial (comercial), a mediação é:

According to Directive 2008/52/EC, of the European Parliament and of the Council of 21 May 2008, on certain aspects of mediation in civil and commercial, mediation is:

“...a structured process, however named or referred to, whereby two or more parties to a dispute attempt by themselves, on a voluntary basis, to reach an agreement on a settlement of their dispute with the assistance of a mediator. This process may be initiated by the parties or suggested or ordered by a court or prescribed by the law of a Member State.”

The UMA (Uniform Mediation Act), drafted by the National Conference of Commissioners on Uniform State Laws (NCCUSL) to be applied in USA, defines “Mediation” as:

“...a process in which a mediator facilitates communication and negotiation between parties to assist them in reaching a voluntary agreement regarding their dispute.”

Another definition is given by the Centre for Effective Dispute Resolution:

“Mediation is a flexible process conducted confidentially in which a neutral person actively assists parties in working towards a negotiated agreement of a dispute or difference, with the parties in ultimate control of the decision to settle and of the terms of resolution.” ([http://www.cedr.com/about\\_us/modeldocs/](http://www.cedr.com/about_us/modeldocs/))

This last definition emphasizes the empowerment given to the parties in the construction of the agreement that puts an end to the conflict, showing what we consider to be the feature that distinguishes mediation from other mechanisms and demonstrating its advantages (Eidenmüller & Griffiths, 2008). Indeed, in a situation of insolvency, the parties will be those who best know their interests and will be better placed to negotiate and establish the foundations for a payment plan or a debt restructuring. And this is an essential piece on the notion that mediation is a consensual and non-adversarial resolution process, opposed to adjudication or even to arbitration, in which a third-party makes a binding decision for the parties.

Mediation is also characterized by the presence of an impartial third party, the mediator, who, guided by ethical and deontological principles, facilitates the dialogue between the parties, in order to achieve the final agreement. When applied to an insolvency proceeding, mediation allows the parties to dialogue and work together on a repayment plan or on a debt restructuring, followed up by the mediator. The intervention of an impartial and independent third party helps to ease existing tensions and may orientate the dialogue to allow the parties focus on the aspects that must be agreed. The mediator will be essential in separating the emotions and clarifying the questions that requiring a solution to avoid the dispersion of the discussion.

The mediation models adopted in the insolvency context may differ in each legal system. In Spain, for instance, the mediator selected presents a proposal of a payment plan that will serve as a basis for the negotiation between the parties (Agüero Ortiz, 2014). Thus an evaluative mediation model was adopted (for comparison see Waldman, 1998). In France, however, the mediator only facilitates the dialogue between debtor and creditors about the recovery plan, adopting a facilitative mediation model (Gallego, 2014). The adoption of each model depends greatly on the cultural and historical differences inherent to each legal system. It seems that in this context it will be the mediator appointed for each insolvency procedure that should choose the model adopted in each case, depending on his own way of acting and the techniques that he prefers to apply. Nevertheless, it will be preferable a prior intervention of the mediator, before any judicial stage, because in this way the mediator may prevent the escalation of the conflict, allowing the construction of a dialogue between parties with higher probability of success.

## **Principles of Insolvency Mediation**

But in order to achieve effectiveness, and relying on mediation, these procedures need to be accompanied with the clear definition of a set of tasks and principles, in order to put debtors and creditors on the same tone, and to allow reaching a fair deal to both parties. These principles are also evolving, especially in a more conservative European market. Also, the law alone can't change anything - a recovery culture, as it exists in the USA or the UK, is urgently needed in Europe, specifically when it comes to public or banking creditors. If it is true that debtors and creditors are in different positions, and have main goals, the purposes on an insolvency procedure, which will lead to a new contract between both parties, can be defined as it follows: debtors want to maintain their business or a sustainable financial situation and creditors want to collect their debts, preferably in full. These apparent antagonistic positions can lead to a common agreement, whose content is, preferably, based on win-win solutions. To achieve this goal is essential to respect some mediation principles, which have some specificity within insolvency proceedings.

1. **Voluntariness** – voluntariness as a principle of mediation will conflict with the majority of insolvency out-of-court procedures, since the use of mediation can be imposed to all creditors, and not only to the ones that gave their consent, upon a previous majority voting, for instance. In the Lehman Brothers process the mediation was made mandatory after a court order (Olejnik, 2012). In this context, and in order to maintain the voluntariness principle, we consider that the appointed mediator should previously contact every parties to explain the mediation procedure, so that a fully and informed consent would be achieved. Voluntariness is also essential to the predisposition of the parties and will reflect, in the future, on the fulfillment of the agreement. When mediation is made mandatory, it shall respect to all creditors and be limited to the realization of a pre-mediation session where the parties must consent to the continuation of the procedure, since the restructuring or payment agreement cannot be imposed to anyone. Thus said, any creditor can quit the mediation in any phase of the procedure.
2. **Confidentiality** – one of the pillars of mediation is the secrecy relative to information given by each party. This principle is reflected in the impossibility of use, as evidence, in court, of any of the statements given or even of the documents produced in the mediation sessions. The establishment of this confidentiality rule is absolutely essential to the dialogue promoted by the mediator, since only in this case the parties will experience more freedom to negotiate and to achieve a consensus in the final settings of the agreement. On the other hand, the public image of both companies and consumers in a financial distress situation is protected.
3. **Equality** – this principle will implicate that both sides will have the same opportunities of participation in the dialogue, and that the power imbalance situations, especially between debtors and creditors, will be defused. Nevertheless, this equality doesn't contend with the differences between creditors, like the amount of debts or the ranking of claims.
4. **Good faith** – the principle of good faith will oblige the debtor, in the first place, of refraining from the use of mediation as a delaying tactic, in which a real solution for the insolvency situation isn't wanted. Therefore, the debtor's proposals, and so the creditors' counter-proposals must be constructive and realistic, and adapted to each situation. To achieve this goal, a full and close cooperation is imposed on the parts, and also a duty of information disclosure, not subtracting any essential data, even from the mediator (Chopard *et al*, 2011). At last, the agreement must be balanced, in order to avoid the direct and unjustified damaging of the protected interests. One must not forget, for instance, that the role of creditors on the indebtedness process of the debtor is often undervalued, namely when loans are given to the debtor who isn't solvent anymore, and such situation has to be taken into account on the negotiating table.

## Mediation advantages in an insolvency process

Insolvency proceedings, although always linked with a state of bankruptcy, have distinctive specificities that depend largely on the debtor and creditors involved. Mediation in insolvency proceedings will allow a speedy and effective resolution of the conflict through dialogue between all parties. Indeed, the delay of an insolvency proceeding will result in loss of money for everyone. But the insolvency mediation advantages do not concern only to swiftness or the possibility of decreasing the burden on the judicial courts.

Mediation may be applied in complex contexts with the participation of various stakeholders (multi-parts conflicts). In a situation of insolvency, mediation allows the participation of all creditors of the debtor, enabling an agreement about the debt restructuring that results from all the manifested interests. Moreover, each insolvency is a specific case with unrepeatable characteristics, but mediation is flexible enough to adapt to different contexts and situations of insolvency (either private or business regardless of size). Mediation may also involve the participation of a multidisciplinary team of mediators working the insolvency proceeding under different conflict viewpoints: psychological, commercial, legal.

Mediation also allows the creation of a range of different options and therefore fosters the creativity of the parties when drafting the payment or restructuring plan. The legal framework that guides the judge or the arbitrator, gives way to the prevalence of the parties' interests which may freely suggest solutions that best fit the

situation of insolvency. The types of business or the bankruptcy estate are factors that differ from process to process and may leverage different solutions that best serve the interests of the parties. On the other hand, the negotiation of a final agreement by the parties will give greater effectiveness to its fulfillment. Indeed, the parties will feel more likely to comply with an agreement that was not imposed to them, but rather results from his will given the expressed interests.

## **THE INSOLVENCY MEDIATOR: ROLE AND FUNCTIONS**

The mediator shall be a neutral third party, external to the insolvency proceedings. So, we do not advocate the intervention of the insolvency administrator or of the trial judge as a mediator, since they act as procedural managers and not as conflict managers. Indeed, the primary function and responsibility of the insolvency administrator or of the court will be to manage the process and not with the conflict involving the debtor and creditors. Thus, the mediator should be external and independent to insolvency proceedings in order to not feel any constraints in the conduction of the dialogue, since there will be no interest in the outcome of it.

Mediation techniques are tools available to the mediator in its action within the conflict. In each mediation, the mediator should be free to apply such instruments as considered appropriate. Therefore, there should not be legally adopted the model or type of intervention of the mediator, that should choose a facilitative mediation model (only promoting collaborative dialogue between debtor and creditors) or an evaluative model (may submit a proposed plan payment as a basis for negotiation between the parties). The mediator may also choose to take joint mediation sessions, or separated sessions (caucus), depending on the existing level of conflict between the parties.

The specific training of the insolvency mediator allows him to work with different stakeholders, understanding several language levels, getting a clear communication between all parties and, at the same time, encouraging the equality between the parties. To pursuit this goal it may intervene in an insolvency proceeding a multidisciplinary team of mediators that bring together lawyers, psychologists, accountants. Thus, the conflict can be worked by different technicians to create an arena for constructive dialogue.

In this context, a question concerning the knowledge that an insolvencies mediator should have arises. Certainly, the mediator ought to have a mediation course, as much as possible, with a specialization in commercial area or even insolvency. Training is absolutely essential to a mediator be prepared to intervene in such conflicts, knowing its specifics. On the other hand, it will be essential to the legal and professional status of the mediator their accountability for professional malpractice or breach of ethical obligations.

## **RECOMMENDATIONS**

From the above, becomes perceptible the benefits of implementing a model for resolving disputes relating to an insolvency situation through mediation. In this context it is recommended:

1. The legal prescription of mediation in insolvency proceedings. This phase of the mediation shall be prior to the court stage in order to determine the respective creditors of the insolvent as well as to establish the payments or debt restructuring plan, possibly combined later with the intervention of a judge or arbitrator to approval of the respective agreement.
2. The legal system of insolvency mediation should establish the basic principles of its application, in particular the confidentiality of the procedure, the neutrality of the mediator or the good faith of the parties.
3. The legal status of the mediator shall be legally established, by laying down requirements for access to the profession, its ethical obligations and the accountability for professional malpractice.
4. Each country should promote the establishment of a Register of insolvency mediators, with specific training in this area in order to be appointed by the parties or by the trial judge.

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## Endnotes

- (1) Commission Staff Working Document Impact Assessment, 12th march, 2014, p.7, available in [http://ec.europa.eu/justice/civil/files/swd\\_2014\\_61\\_en.pdf](http://ec.europa.eu/justice/civil/files/swd_2014_61_en.pdf)
- (2) The recent recommendation of European Commission from 12.03.2014 brings the “second chance” approach to honest entrepreneurs in order to push insolvency reforms at a national level. Available in [http://ec.europa.eu/justice/civil/files/c\\_2014\\_1500\\_en.pdf](http://ec.europa.eu/justice/civil/files/c_2014_1500_en.pdf)
- (3) Referring to the latest European interventions of the IMF, we can see the 11<sup>th</sup> Review of the Extended Arrangement in Portugal, stating the importance of reinforcement of out-of-court procedures, p. 16, available in <http://www.imf.org/external/pubs/ft/scr/2014/cr14102.pdf>; and the 12<sup>th</sup> Review of the Extended Arrangement in Ireland, which conducted an extensive reform of the insolvency procedures based on out-of-court solutions, specially at a personal level, available in <http://www.imf.org/external/pubs/ft/scr/2013/cr13366.pdf>
- (4) Recommendations 160-168 of the Legislative Guide on Insolvency Law, Part One and Two, UNCITRAL, New York, 2005, p. 244 available in [http://www.uncitral.org/pdf/english/texts/insolven/05-80722\\_Ebook.pdf](http://www.uncitral.org/pdf/english/texts/insolven/05-80722_Ebook.pdf)

- (5) UK, for instance, has both voluntary arrangements (workout) and fast track procedures as we can see in <https://www.gov.uk/options-for-paying-off-your-debts>

# THE EFFECTS OF PUBLIC ATTITUDES TOWARDS THE INNER CITY OF JOHANNESBURG AS A BRANDED DESTINATION

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## ABSTRACT

*Cities across the world have shifted their focus to urban development and place marketing strategies. These concepts are increasingly becoming important since the competition between cities have intensified globally in order to obtain investments, attract tourists, provide better living space, and to improve community businesses and overall economies of the city. Johannesburg has made use of various labels to provide a unique and attractive destination brand. The city has undergone significant changes in order to improve and reposition its image. In particular, there has been a focus on the redevelopment and brand image repositioning of the Inner City of Johannesburg. Redevelopment strategies have been outlined and implemented in order to improve the areas within the Inner City of Johannesburg. The primary purpose of this study was to investigate the effects of the current attitudes and perceptions of the public towards the Inner City of Johannesburg. A quantitative approach was used. A convenience sample consisting of 343 individuals within the Inner City of Johannesburg completed the distributed survey instrument. The data analysis consists of multiple linear regression analysis. The results of this study indicate that the Inner City of Johannesburg lacks a general positive attitude. In effect, individuals do not see themselves relocating or retiring within the areas of the Inner City of Johannesburg.*

Keywords: Attitudes, Place branding and Branded Destination

## INTRODUCTION

In the past, city areas were known to be the place of work and residence for the majority of city locals (Hughes, 1999). During the mid-twentieth century, numerous inner city areas have experienced a decline in population and have been abandoned (Hughes, 1999). In general, this was due to the increased and improved technologies and increased housing options in outer suburbs which enabled people to live in areas away from their workplace (Balsas, 2000). The abandoned inner city areas were left to become unsafe with limited business and leisure opportunities together with limited access (Thomas & Bromley, 2000).

Due to these problems, cities across the world have shifted their focus to urban development strategies and place marketing strategies (McCarthy, 2002). These concepts are increasingly becoming important since the competition between cities have intensified in order to obtain investment, attract tourists, provide better living space, and to improve community businesses and overall economies of the city (Kotler & Gertner, 2002).

In particular, The City of Johannesburg has made use of various labels and brands to market the city as whole. Johannesburg is one of six metropolitan cities in South Africa and has transformed from a mining centre and industrial city to a metropolitan centre and to financial and business services (Ahmed, 2010). The city displays specific features and has undergone significant changes and marketing labels to brand and reposition its image. This is in order to sell the city to tourists, potential investors and residents (Peyroux, 2008; Beavon, 2007). During the 19<sup>th</sup> century The City of Johannesburg used brands and labels such as “The Empire’s great gold centre” and the “financial and economic hub of Sun-Saharan Africa”. Johannesburg was then referred to as “little New York” and “Southern Africa’s transport hub and shopping centre” in the 20<sup>th</sup> century. The 21<sup>st</sup> century has seen Johannesburg labelled as a “world-class city” which was transformed to “Golden Heartbeat of Africa” and most recently “World-class African City” (Walsh, 2013).



Although the City of Johannesburg has been branded through different images and labels, it is a city of vast variety where there are extremes of poverty in some areas and other areas are driven by success and high-class. More specifically, the Inner City of Johannesburg has experienced a period of stagnation since the end of apartheid and has had various development projects with the aims of improving the areas and its image (Dirsuweit, 1999).

City of Johannesburg & Johannesburg Development Agency (2009) highlights some of the improvements since the implementation of redevelopment initiatives. An example is the private sector taking responsibility for the improvement, management and maintenance of public space which includes: Civic Park Braamfontein, Braamfontein streetscape, Main Street, Gandhi Square, Fox street, Fashion Square, FNB Block, ABSA Campus, Standard Bank Superblock and Anglo Main Street.

Taking into account the developments that have taken place, this particular study will investigate the effects of the attitudes of the public towards the Inner City of Johannesburg as a desired destination brand. The nature of this research is descriptive and quantitative. This study is important in understanding the effectiveness of previous marketing communications of the upliftment of the Inner City of Johannesburg. This study provides an understanding of the attitudes the public have towards the Inner City of Johannesburg.

## **PROBLEM DEFINITION**

For a long time, places have felt the need to differentiate themselves from each other in order to emphasise their unique attributes in search for economic, socio-psychological or political goals (Kavaratzis & Ashworth, 2005). Destination brands have the ability to enhance the image of a place while attracting, tourists, investments and business improvements for the place (Trueman, Klemm & Giroud, 2004). While the notion of urban branding is widespread globally, in South Africa it remains unexplored (Rogerson, 1996). There is therefore a need to contribute to place branding research in the South African context.

Although there have been improvements within the inner city of Johannesburg, there are still pertaining issues present. According to the Inner City BRT Station Precinct Analysis Market Research (2009), the following issues still remain: crime levels and lack of security; the need to upgrade areas in order to increase rentals on buildings; and the need to decrease illegal land invasion and occupation within the inner city centre areas. This presents a need to understand which factors of the Inner City are considered to be important amongst its public consumers.

The aim of the marketing and communications programmes for the Johannesburg Inner City was to create it a specific identity: “a safe, African City Centre where the arts, culture and entertainment meet thriving, business and industry” (Inner City Position Paper, 2001). Communication of city improvements and its brand is another important issue that has been recognised. Although many cities have successfully rebuilt their inner city centres, the public often is not made aware of these changes (Walle, 1993). Ineffective communication of city improvements may cause a city to suffer from a poor brand image. Trueman, Klemm and Giroud (2004) reveal that having poor perceptions of a city further hinders the future prosperity of a city. Negative perceptions of a place may reduce future investments, is disadvantageous for attracting tourists, and it weakens business community activities of the place (Trueman *et al.*, 2004). On the other hand, a positive city brand image reinforces improvement and development of the place. This may instil community pride and enhance economies of the city (Trueman *et al.*, 2004). The image of a place may strongly influence the wellbeing with the satisfaction and wellbeing and satisfaction of its citizens and visitors. This indicates a need for understanding the attitudes and perceptions the public has towards a city centre brand.

## **RESEARCH OBJECTIVES**

### **Primary Objective**

Since the aim of the marketing and communications programmes for the Johannesburg Inner City is to create it a specific identity: “a safe, African City Centre where the arts, culture and entertainment meet thriving, business

and industry” (Inner City Position Paper, 2001), the primary research objective of this study is to therefore investigate the current attitudes and perceptions of the public towards the Inner City of Johannesburg as a destination brand.

## Secondary Objectives

- To identify which factors of the Inner City of Johannesburg have an effect on the attitude towards its brand;
- To explore if public perceptions of the inner city of Johannesburg coincide with the desired vision for the inner city.

## LITERATURE OVERVIEW

### Place Branding

Place branding can ultimately be defined as a way of communicating and differentiating a destination from its competitors by highlighting its unique attributes (Qu, Kim & Im, 2011). Place branding may vary according to scale. Some concepts have focused on nation branding, urban branding, city branding, town branding and region branding (Hanna & Rowley, 2008).

The place “product” can be described as a unique combination of buildings, venues, facilities, scenery and culture which form the basis for public and private business, residence and entertainment (Hankinson, 2009; Cakmak & Isaac, 2012). The “consumers” of the place are those individuals who utilise the place for numerous reasons such as luxury, entertainment business or residential purposes (Qu *et al.*, 2011).

Place branding evolved from various research fields. It has been studied extensively under tourism and has moved from tourism research to business and marketing studies (Hankinson, 2009).

### Importance of place brands

Researching the destination brand of the inner city is of importance (Gilmore, 2007). Destination brands enhance the image amongst its residents, visitors and aids destination management organisations in measuring their goals and achievements for the destination. Enhancing the brand and image of a destination may aid in attracting investments, promote business opportunities, both local and international tourists to the area. Place brands are known to provide a positive economic impact on the area (Trueman, *et al.*, 2004; Qu *et al.*, 2011).

### Factors that affect place branding

The brand of a place is affected by its perceived image (Morgan, 2003). The image of a place may be formed by personal factors and stimulus factors such as information sources, previous experience of the place, and the distribution of information. Various other factors within a destination may affect the image perceived by individuals. Some of these factors include architecture, the culture, the nature of the place, the atmosphere, the government services, the transport facilities and crime and safety levels of the place (Wang & Fesenmaier, 2006; Wood, 2000).

Attitudes are evaluative judgements (Malhotra, 2005). These judgements may be retrieved from memory, constructed on the spot, or a combination of both. Furthermore, attitudes are evaluated according to an individual’s goals and motivations which, depending on the situation, may either be temporary or enduring in nature. In addition, the process of attitude formation can occur spontaneously through perceptual heuristics and images which relate to feelings (affect) or through a deliberate process of thinking and recalling beliefs (cognition) (Argyriou & Melewar, 2011).

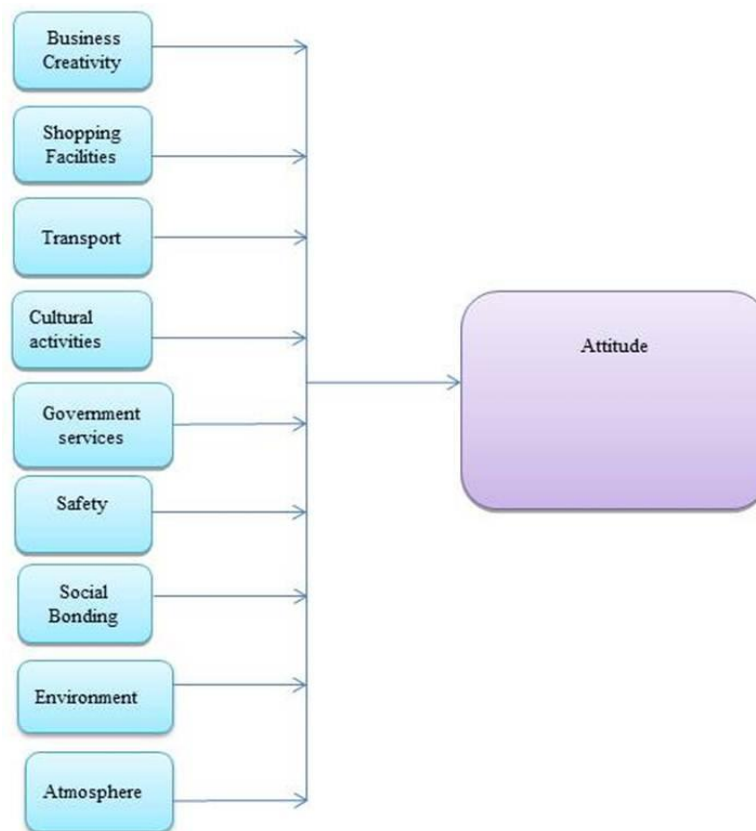
Attitudes have been considered to be important especially for consumer behaviour purposes (Argyriou & Melewar, 2011). The attitude a person holds is a function of the beliefs a person has at a given time. This allows marketers to explore the strengths and weaknesses of their brands according to relevant characteristics

(Gresham, Bush & Davis, 1984). Attitudes are also of importance for place brands. Having a positive perception of a place brand may instil community pride and enhance the economies of the place whereas on the other hand, negative perceptions may hinder a place's prosperity by reducing future investments, reduce the number of tourists which will be disadvantageous for the business community activities of the place (Trueman *et al.*, 2004). Factors that influence attitude include motivation, prior knowledge, experience, and mere exposure to the object (Gresham *et al.*, 1984). The level of experience and exposure will influence the nature of the attitude. Merrilees, Miller and Herrington (2009) designed a brand association model that considers the different elements of a place and its effect on the attitude of the brand of that place. The brand association model incorporates the different factors into safety, cleanliness, the natural environment (scenery, atmosphere, climate), business creativity (business opportunities, business innovation), shopping facilities (fashion, home-ware, places for coffee), transport facilities, government services (healthcare, educational facilities, government initiatives), cultural activities (cultural diversity, events and festivals) social bonding (a place to socialise with friends and family), intentions to stay in the city and the overall brand attitude of that place.

## PROPOSED CONCEPTUAL MODEL

The model adopted for this study is the modified version of the brand association model by San Martin and del Bosque (2008). The elements of the model are elaborated below.

**Figure 1: The Modified Brand Association Model**



## HYPOTHESES

H<sub>1</sub>: The greater levels of perceived business creativity has an effect on the place brand attitudes towards the Inner City of Johannesburg.

H<sub>2</sub>: The greater levels of perceived shopping facilities has an effect on the place brand attitudes towards the Inner City of Johannesburg.

H<sub>3</sub>: The greater levels of perceived transportation facilities has an effect on the brand attitudes towards the Inner City of Johannesburg.

H<sub>4</sub>: The greater levels of perceived cultural activities has an effect on brand attitudes towards the Inner City of Johannesburg.

H<sub>5</sub>: The greater levels of perceived government services has an effect on place brand attitudes towards the Inner City of Johannesburg.

H<sub>6</sub>: The greater levels of perceived safety has an effect on place brand attitudes towards the Inner City of Johannesburg.

H<sub>7</sub>: The greater levels of perceived social bonding has an effect on the place brand attitudes towards the Inner City of Johannesburg.

H<sub>8</sub>: The greater levels of the perceived environment has an effect on the place attitudes towards the Inner City of Johannesburg.

H<sub>9</sub>: The greater levels of perceived atmosphere has an effect on the place brand attitudes towards the Inner City of Johannesburg.

## **RESEARCH DESIGN AND METHODOLOGY**

### **Sampling Technique**

The nature of this study is descriptive and quantitative. A convenience sample of 343 individuals within the Johannesburg Inner City was obtained for this particular study. The inner city forms part of Region 8 of the City of Johannesburg. It consists of the City Centre, the lower density predominately residential areas to the east of the City Centre consisting of Yeoville, Bertrams, Troyeville, Braamfontein, Jeppestown, the higher density suburbs of Berea and Hillbrow, and the areas of Newtown, Fordsburg and Pageview/Vredorp to the west of Newtown (Inner City Position Paper, 2011).

### **Data Gathering**

A pilot study was not done since the scales were taken from sources of previous tried and tested studies. The scales for testing “affect” were taken from Beerli & Martin (2004). To test the perception, cognition and conation of respondents, the scales from Merrilee *et al.* (2009) were used. These were asked in the form of 7-likert-scales where 1= strongly disagree and 7=strongly agree.

### **Data Analysis**

Multiple linear regression was used to analyse the different factors that have an effect on the place brand attitude.

### **Scope of the study**

Altitudes are moderated by factors such as the mood the person is in (Qu, *et al.*, 2011). This may have had an effect on the results of the study and there is no control of this factor on attitude. It should be noted that an individual’s image formation and therefore their attitudes towards a place may be affected by prior information (primary and secondary) and other influences such as influences by friends/family. This study does not test these factors that may have influenced the attitude of the city centre of Johannesburg.

The study only focused on individuals who are in the inner city areas at the time of the questionnaires being handed out. Due to time constraints, the surveys were not handed out to other areas of Johannesburg.

### **Reliability of the data**

**Table 1 Reliability of Variables**

Variable	Cronbach Alpha
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Safety	0.914532
Environment	0.911447
Overall brand Attitude	0.951029
Atmosphere	0.812748
Business creativity	0.820901
Shopping Facilities	0.828250
Transport Facilities	0.819161
Cultural Activities	0.851302
Government Services	0.926853
Social Bonding	0.884742
Intentions	0.960201

The Pearson's Cronbach Alpha test was used to test the reliability of the scales used for each variable in the survey. It is generally accepted that a Cronbach Alpha above 0.6 is satisfactory for a data set (Malhotra, 2006). The above table indicates that all variables used in this research are above 0.6 and therefore have a strong reliability. This means that the scales used to test the variables of this research have been reliable. It should be noted that the variable Atmosphere had negative outcomes due to two questions being worded in a negative manner. In order to remove the negative values reverse coding was applied to the data of the negatively asked questions. The reversed coded data has been used for all statistical analysis.

## HYPOTHESES TESTING

The hypotheses of the study were tested at a 5% level of significance. If a p-value is smaller than the level of significance, one would reject the null hypothesis. If the p-value is larger than the level of significance, one would fail to reject the null hypothesis (Malhotra & Peterson, 2006).

### Model:

$$\text{Model: } y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + E_i$$

$$y_i = \text{Intercept}X_1 + \text{Atmosphere}X_2 + \text{Safety}X_3 + \text{Environment}X_4 + \text{Business Creativity}X_5 + \text{Shopping Facilities}X_6 + \text{Transport Facilities}X_7 + \text{Cultural Activities}X_8 + \text{Government Services}X_9 + \text{Social Bonding}X_{10} + E_i$$

Since there were more than two variables that affected the variable of attitude a multiple linear regression was used to analyse the relationships between the various factors of the Inner City of Johannesburg and the attitude towards the brand of the attitude.

Multicollinearity occurs when there are variables within a regression equation are highly correlated with one another. This means that any changes in one predictor variable will cause a change in other predictor variables. Furthermore, when the correlation is removed from the equation the significance values of the coefficients will alter to a large extent (Bates & Watts, 1998).

Multicollinearity will be present if the condition indices are above the value of 10. If multicollinearity is present then simple linear regression analysis would need to be conducted for each variable on attitude. By examining the condition indices in Table 2 it can be seen that no multicollinearity is present. The multiple linear regression analysis is therefore appropriate for this study.

**Table 2 Collinearity Diagnostics**

Collinearity Diagnostics (intercept adjusted)											
#	Eigen value	Condition Index	Proportion of Variation								
			AVATMOS	AVSAFETY	AVENV	AVBUSCREAT	AVSHOPFAC	AVTRANSC	AVGOVSER	AVCULTACT	AVCOSBOND
1	3.33458	1.0000	0.02456	0.00751	0.00786	0.02583	0.02607	0.02212	0.02697	0.02788	0.02898

2	1.262 05	1.62 54	0.072 71	0.227 63	0.246 16	0.015 78	0.030 66	0.023 40	0.00809	0.007 85	0.0011 4
3	0.808 76	2.03 05	0.021 28	0.060 83	0.140 20	0.137 72	0.042 55	0.362 14	0.13304	0.000 434	0.0092 8
4	0.804 73	2.03 56	0.018 75	0.542 52	0.310 95	0.056 64	0.000 17	0.098 22	0.00516	0.002 10	0.0055 4
5	0.735 42	2.12 93	0.019 03	0.005 12	0.011 80	0.003 55	0.120 87	0.242 17	0.20989	0.328 03	0.0000 18
6	0.630 61	2.29 95	0.002 77	0.035 09	0.004 05	0.244 88	0.001 94	0.006 37	0.17465	0.064 51	0.4739 8
7	0.540 78	2.48 31	0.604 11	0.088 95	0.242 03	0.000 22	0.242 50	0.053 75	0.01296	0.003 39	0.0000 02
8	0.530 04	2.50 82	0.025 15	0.021 61	0.013 87	0.027 59	0.002 30	0.132 51	0.41030	0.499 57	0.1633 5
9	0.353 03	3.07 33	0.211 65	0.010 73	0.023 08	0.487 80	0.532 95	0.059 32	0.01894	0.066 24	0.3177 1

**Table 3 Multiple Linear Regression**

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	270.55467	30.06163	33.63	<.0001
Error	306	273.49921	0.89379		
Corrected Total	315	544.05389			
Root MSE		0.94540	R-Square		0.4973
Dependent Mean		3.11656	Adjusted R-Square		0.4825
Coefficient Variance		30.33484			
Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t
INTERCEPT	1	-2.21500	0.49678	-4.46	<.0001
ATMOSPHERE	1	0.36698	0.10813	3.39	0.0008
SAFETY	1	0.05663	0.04497	1.26	0.2089
ENVIRONMENT	1	0.14296	0.04757	3.01	0.0029
BUSINESS CREATIVITY	1	-0.04205	0.05905	-0.71	0.4769
SHOPPING FACILITIES	1	0.09772	0.05733	1.70	0.0893
TRANSPORT FACILITIES	1	-0.02752	0.05300	-0.52	0.6039
GOVERNMENT SERVICES	1	0.24610	0.06162	3.99	<.0001
CULTURAL ACTIVITIES	1	0.11310	0.05888	1.92	0.0557
SOCIAL BONDING	1	0.40335	0.05312	7.59	<.0001
Number of Observations Read	316				
Number of Observations Used	316				

The results indicate that there are five insignificant variables: Safety, Business Creativity, Shopping Facilities, Transport Facilities and Cultural Activities.  $H_1$ ,  $H_2$ ,  $H_3$ ,  $H_4$  and  $H_6$  were rejected. This means that

cultural government services, the environment and the atmosphere are the significant factors that have an effect on the brand attitude of the Inner City of Johannesburg.

It should be noted that these results differ with those obtained in the research of Merrillees *et al.*, (2009) which explored the antecedents of place brand attitudes of the Gold Coast City in Australia. The findings of this previous study indicate that safety, business creativity, and the natural environment had a major effect on the place brand attitudes of that city. Although this is the case, it has been noted that each city or place is likely to have a dominant distinct feature and this may vary from one place to another (Morgan, 2004).

## **DISCUSSION OF RESULTS**

### **Perceptions of the Atmosphere and Environment of the Inner City of Johannesburg**

It is perceived that the Inner City of Johannesburg is not a pleasant and exciting place and feel neutral to the environment being clean and aesthetically pleasing. Furthermore, individuals have neutral but somewhat negative perception of the Inner City being a good place for social bonding. This contrasts with the vision of creating a vibrant Inner City of Johannesburg. An implication of this is that marketers need to consider different ways in which to market the place as being exciting and pleasing. Furthermore, measures would need to be put in place that will make the place have an exciting and pleasant atmosphere.

### **Perceptions of Safety in the Inner City of Johannesburg**

Although safety measures have been put in place such as the increase in Criminal Investigation Department, CCTV and metro police presence, there are still negative perceptions of the safety. Individuals perceive crime to be present and feel unsafe in the areas of the Inner City. Furthermore, individuals would make the effort to tell others that the location is unsafe. Individuals are neutral towards business creativity but tend to have a slight positive perception of there being good business incentives and opportunities within the Inner City of Johannesburg. An implication of this is that more safety measures should be put in place. Safety initiatives should further be communicated and marketed to the consumers of the Inner City of Johannesburg.

### **Perceptions of Shopping Facilities in the Inner City of Johannesburg**

The perceptions of shopping facilities are neutral in that individuals have a neutral perception towards the shopping facilities available in the areas of the Inner City of Johannesburg. Furthermore there is a neutral perception of there being good places to eat and go for coffee in the areas of the Inner City of Johannesburg. This may be considered surprising due to the fact that a shopping district has developed in the Inner City. The neutral perceptions may be due to the fact that it is not an important contributor towards brand attitude. Marketing programmes should promote the vibrant shopping district if more awareness and positive perceptions are desired.

### **Perceptions of the Transport Facilities in the Inner City of Johannesburg**

There is a negative perception of the transport network in that individuals do not perceive it to be adequate in the areas of the Inner City of Johannesburg. It should be noted that this perception may be heightened due to the recent construction activities occurring in order to implement the Rea Vaya bus system and Guatrain stations.

### **Perceptions of Cultural Activities in the Inner City of Johannesburg**

The perceptions of cultural activities are neutral in that individuals have neutral perceptions towards the cultural activities, events and festivals that take place in these areas. Although Newtown has been developed into a

cultural cluster, destination marketers would need to consider a programme that highlights cultural activities that take place within the Inner City of Johannesburg.

## **Perceptions of Government Services in the Inner City of Johannesburg**

There are negative attitudes towards the government services in that individuals have a perception that there is no access to good healthcare, there are not many educational facilities, and that the needs of the elderly are catered for in the areas of the Inner City of Johannesburg. Furthermore the negative perceptions may be attributed to respondents not being pleased with the council's services and not trusting the government to make sound decisions regarding the Inner City of Johannesburg. Development initiatives would need to measure the level of standard of government services and improvements would need to be implemented if required to do so. In order to alleviate the negative perceptions, marketers would need to highlight improvements made. This can only be done once the implementation of the improved government services has been successful.

## **The Attitudes of the Inner City of Johannesburg as a branded destination**

The neutral and negative perceptions of the factors of the Inner City of Johannesburg have had an effect on the attitude of the brand of the place being negative. This indicates that individuals are not proud of the Inner City of Johannesburg. Furthermore, individuals within the Inner City do not believe that the Inner City has a good reputation that has a good lifestyle. This indicates that they would prefer being in other areas rather than the Inner City of Johannesburg.

## **The Effect of the Brand Attitudes of the Inner City of Johannesburg**

The brand attitude and the awareness of developments have a significant effect on the intentions to eventually stay or retire within the Inner City of Johannesburg. The negative attitude has led to individuals having negative intentions. On average, individuals do not see themselves staying in the Inner City of Johannesburg in the future and are not content in considering relocating at this current point in time. Despite the housing redevelopment initiatives, it can be seen that people are still two-minded about moving to the Inner City.

In terms of behaviour, the visiting behaviour during the day varies but the visiting behaviour during the night time drastically drops where majority of respondents never visit the Inner City of Johannesburg during the night time. This contrasts with the vision of the Inner City being a vibrant 24-hour city area. Since the above factors may have an effect on the behaviour, as an implication, the development of those factors would need to be fully implemented and then communicated to the public in order to create a vibrant 24-hour city concept within the areas of the Inner City of Johannesburg. It should be noted that the highlighted marketing implications is dependent on the implementation of the redevelopment strategies.

It can be seen from above that positive perceptions of the Inner City of Johannesburg are not present. This has had an effect of a negative attitude of the brand of the Inner City of Johannesburg. This may indicate that perceptions are still rooted in the past where the Inner City of Johannesburg is considered to be crime ridden with poor government services. It may take time for perceptions to change since the redevelopments of the Inner city of Johannesburg are still in process.

## **LIMITATIONS**

Attitudes are moderated by factors such as the mood the person is in (Qu, *et al.*, 2011). This may have had an effect on the results of the study and there is no control of this factor on attitude. It should be noted that an individual's image formation and therefore their attitudes towards a place may be affected by prior information (primary and secondary) and other influences such as influences by friends/family. This study does not test these factors that may have influenced the attitude of the city centre of Johannesburg. The study only focuses on individuals who are in the inner city areas at the time of the questionnaires being handed out. Due to time constraints, the survey was not distributed to other areas of Johannesburg. Future research should consider making a comparative analysis of attitudes of individuals between different areas within Johannesburg and the Inner City of Johannesburg.



A major limitation to this study is the language barrier between the research instrument used and the respondents. Since the Inner City of Johannesburg is a diverse place, there were areas where individuals do not understand English. Low-skilled workers and residents in areas such as Berea and Hillbrow were found to not have a complete understanding of English. This may be due to cultural and educational backgrounds. Respondents who could clearly understand English were only able to participate in this study. The data and results may therefore be slightly skewed according to respondents who understand English. Future research should consider having an instrument that may be in different languages found within the Inner City of Johannesburg.

This was a broad study and considered all types of possible “consumers” within the Inner City of Johannesburg. Future research should consider a focus on each of the different types of consumers such as individuals who use the Inner City for residence, workplace, shopping, tourism, culture, entertainment purposes etc. This study focuses on attitudes at a specific time. Attitudes are constantly changing and future research should therefore consider studying the attitudes of individuals over a period of time. It should be noted that redevelopment initiatives at this point in time are still underway and the process has not been completed. This may have affected the results of the effects of the attitudes on the brand of the Inner City of Johannesburg.

## CONCLUSION

Inner City of Johannesburg has experienced a period of stagnation since the end of apartheid and has had various development projects with the aims of improving the areas and its image (Dirsuweit, 1999). In order to uplift the Inner City of Johannesburg a vision for the Inner City of Johannesburg was put forward and since then redevelopment initiatives have been implemented. The primary the primary research objective of this study is to understand the current attitudes and perceptions of the public towards the Inner City of Johannesburg as a destination brand and its effect on consumer intentions. In this study it was identified that negative attitudes towards the brand are present and therefore individuals are reluctant to consider residing in the Inner City of Johannesburg.

It has further been observed that the atmosphere of the place, the environment, the government services and the social bonding factors have a significant effect on the brand attitude towards the Inner City of Johannesburg. In terms of behaviour, the visiting behaviour during the day varies but the visiting behaviour during the night time drastically drops where majority of respondents never visit the Inner City of Johannesburg during the night time

The aim of the marketing and communications programmes for the Johannesburg Inner City is to create it a specific identity: “a safe, African City Centre where the arts, culture and entertainment meet thriving, business and industry”. The results indicate that the Inner City of Johannesburg lacks positive perceptions and therefore the perceptions do not coincide with vision and marketing communication aims.

Several limitations of this study have been outlined together with possible future research approaches to this topic. This research study provides an understanding of the current attitudes and intentions of the public towards the Inner City of Johannesburg. This research further provides marketing implications that coincide with redevelopment initiatives.

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# TECHNOLOGY AND INNOVATION POLICY FOR THE DEVELOPMENT OF THE RARE EARTH INDUSTRY IN BRAZIL

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## ABSTRACT

*This paper aims to present the main findings of a prospective study concerning the future of global rare earth industry (REI), from the perspective of formulating a technology and innovation policy for Brazil in this strategic area. The prospective study - carried out in 2012 – emphasized the importance of understanding and anticipating the global market dynamics for rare earth industry, including drivers, restraints, and opportunities related to five applications, namely permanent magnets, catalysts, metal alloys, phosphors, and polishing powders, including special glasses and lenses manufacturing. The main results can be summarized as follows: (i) four alternative scenarios of the global REI (2012-2030); (ii) a reference global scenario as a backdrop for the strategic analysis of competitive position of Brazil in the global rare earth's arena (same temporal horizon); (iii) strategic analysis extended to supply chains of five applications in Brazil; and (iv) a technology and innovation policy for the development of REI in Brazil. Essentially, the conclusion of the prospective study is that the sustainable development of rare earth industry in Brazil will require the review of regulatory framework of mineral resources, especially strategic ones as REEs, technological domain and collaborative efforts around key technologies of mineral processing and purification of RE materials, and also those technologies related to permanent magnets, catalysts, metal alloys, phosphors, polishing powders, including special glasses and lens manufacturing.*

**Keywords:** rare earth industry; innovation systems; scenario thinking; strategic foresight; technology and innovation policy; Brazil.

## INTRODUCTION

The rare earth elements (REEs) are a group of 17 metallic elements, 15 within the chemical group called lanthanides, plus yttrium and scandium, that present special geochemical properties. REEs are responsible for the more recent innovations in permanent magnets; catalysts; phosphors; improved metal alloys; polish powders; special glasses and lens; and ceramics and batteries, which are at the heart of many new high-tech, sustainable energy and mobility, defense and medical technologies (US Geological Survey, 2013; Chen, 2011; Alonso et al., 2012; Massari and Ruberti, 2013; Wübbke, 2013; and CGEE, 2014).

REEs are relatively abundant in the earth's crust, but discovered minable concentrations are less common than for most other ores. It has been estimated that there are reserves in thirty-four countries: six countries in Europe (among all, Russia Estonia and Denmark/Greenland), fourteen in Asia, ten in Africa, and then USA, Canada, Brazil and Australia (Chen, 2011). However, discovered minable concentrations are less common than for most other ores. U.S. and world resources are contained primarily in bastnäsite and monazite.

Bastnäsite deposits in China and the United States constitute the largest percentage of the world's rare earth economic resources, while monazite deposits constitute the second largest segment. Apatite, cheralite, eudialyte, loparite, phosphorites, rare-earth-bearing (ion adsorption) clays, secondary monazite, spent uranium solutions, and xenotime make up most of the remaining resources.

World mine production of REEs reached 110,000 tons in 2012, while the current demand already exceeds 135,000 tons per year, with an expected growth to 210,000 tons per year in 2014. As mining projects are slow to start production, it is expected that world REEs production will not exceed 160,000 tons per year over the next years, which may lead to scarcity of these resources in the short term.

Today, one country (China) has a near-monopoly on global REE production and processing and downstream production around the world is critically dependent on Chinese supply. On 28 December 2010, China announced the decision to cut the REE export quota by another 40 percent, raising concerns among its major customers – the European Union (EU), the USA, and Japan. They have filed a case against China at the World Trade Organization, challenging its restrictions on rare earth exports in March 2012. Following these requests, the WTO set up an investigation into China's restrictive rare-earth trade policies.

A second factor related to REEs' supply instability is the fact that these elements are often found together, but associated with other ores, like uranium, thorium, and cassiterite. They occur in mineral deposits widespread throughout the world and it is very difficult to find economically exploitable deposits and simple methods of extraction and separation due to their very similar properties (Gupta and Krishnamurthy, 2005; Massari and Ruberti, 2013; Alonso et al, 2012).

Additionally, the environmental and social conditions under which they are mined in China also affect REE supply. Claiming domestic needs and environmental concerns, China continued efforts to restrict the supply of REEs. Rare earth producers in China were required to submit to environmental inspections and their feed material was to come from licensed rare-earth mines (US Geological Survey, 2013).

Summing up, the future availability of REEs is of concern due to near-monopolistic supply conditions, environmentally unsustainable mining practices, and rapid demand growth (Alonso et al., 2012; Massari and Ruberti, 2013; Wübbke, 2013). Prospective assessments of how REEs consumers around the world will face geopolitical, economic, environmental, and technological challenges may seem a paradox, given the high degree of uncertainty and complexity inherent to the focused industry.

From the global REI outlook, some issues emerge as critical uncertainties, especially those linked to instable supply of REEs and technological change: Will the Chinese hegemony remain for next years and their control over the RE global market? For how long? The production will be concentrated in a few countries? Or will supply sources be diversified? There will be continuity and ensuring of the supply of RE materials in the next decades? Will price volatility of RE materials occur, with a strong impact on the development of projects outside China? Will prices be regulated by the entry of new producers of REEs besides China? Will new material substitutes emerge with the same or better attributes as rare earths (price, quality, sustainability)?

These are questions for which planning based on prospective tools, particularly prospective scenarios, offers a robust conceptual framework. In fact, prospective scenarios are addressed for complex and highly volatile environments, organizing and revealing uncertainties and trends concerning the analysis of potential impacts of emerging technologies on current and future industrial configurations in long-term horizons (Godet, 2001; Durance and Godet, 2010; Van der Heijden, 2005; Schoemaker and Van der Heijden, 1992; Schwartz (1996; 2004).

This paper - which is based on a prospective study carried out at CGEE by the authors in 2012 – emphasizes the importance of understanding and anticipating the global market dynamics for the rare earth industry (REI) including drivers, restraints, and opportunities focusing on five major application segments, namely permanent magnets, catalysts, metal alloys, phosphors, and polishing powders, including special glasses and lenses manufacturing. It aims to present the main findings of the referred prospective study concerning the future of global REI, from the perspective of formulating a technology and innovation policy for Brazil in this strategic area.

Firstly, we present the theoretical background encompassing scenario thinking; strategic foresight; innovation systems; and technology & innovation policy. Subsequently, we describe the methodology adopted for developing the prospective study, combining tools and conceptual approaches covered by theoretical background. We then present the results of the prospective study, focusing on its participative and conclusive phases, and discuss challenges and policy implications. Finally, we propose a national technology & innovation policy for the development of REI in Brazil and draw conclusions.

## **THEORETICAL BACKGROUND**

The theoretical background encompasses four main themes: (i) scenario thinking; (ii) strategic foresight; (iii) innovation systems; and (iv) technology and innovation policy. We explore, firstly, the main issues to which research efforts have been devoted in scenario thinking and strategic foresight, based on recent literature (up to 2013) from future-oriented scholarly journals such as *Technological Forecasting and Social Change*, *Futures*, *Futuribles*, and *International Journal of Forecasting*, and also from the methodological contents developed by Laboratoire d'Innovation de Prospective Stratégique et d'Organisation (Lipsor), in France.

Then, we discuss conceptual frameworks of innovation systems, with special attention to Freeman (1987), Lundvall (1992), Edquist and Johnson (1997), and OECD (1997) works. These frameworks proved to be quite useful for analyzing the supply chain of rare earths and, specially, for formulating a national technology & innovation policy in this strategic area, focusing five major applications in Brazil. And, finally, we briefly describe the framework proposed by Lundvall and Borrás (2006) for science, technology, and innovation policy formulation, as the basis for proposing a national technology & innovation policy for the development of REI in Brazil.

### **Scenario thinking and strategic foresight**

The following theoretical approaches were considered for REI scenario building: Godet (2001); Durand and Godet (2010); Van der Heijden (2005); Schoemaker and Van der Heijden (1992); and Schwartz (1996; 2004). This approach consists of a structured process with specific frameworks for its application (for example, impact/uncertainty grid and scenario matrix). It enables decision- and policy-makers to directly integrate scenario planning into the strategic foresight and policy formulation processes, and thus meet the requirements of complex and volatile contexts (as in the case of global REI). At the same time that allows the strategists to plan for multiple contingencies, it broadens the future vision by integrating the perspectives of stakeholders into the foresight and policy formulation processes.

The scenario-based approach is described in six steps, as follows: (i) identification of key strategic issue, namely scenario scope, including definition of variables that should be considered; (ii) structural analysis (using MicMac tool developed by Lipsor) for the definition and classification of variables defined in the first step; (iii) description of future conditioning factors, such as trends, invariants, ongoing changes, weak signals and critical uncertainties (Godet); (iv) structuring and prioritizing the factors identified in step 3 as a basis for determining two scenario dimensions. These two dimensions are key for creating and describing the scenarios in step 5. The frameworks suggested are the impact/uncertainty grid and scenario matrix (as proposed by Global Business Network); (v) creation and description of four alternative scenarios and selection of the reference scenario; and (vi) challenges and policy implications assessment, followed by definition of strategic options under the reference scenario conditions.

For the purpose of the prospective study on global REI (focus of this article), strategic foresight was a key instrument for the development and implementation of a national technology and innovation policy in this strategic area in Brazil. The main focus of prospective activities by Center for Strategic Studies and Management – Science, Technology and Innovation (CGEE, Brazil) has been at the national level as government have sought to: (i) set priorities in strategic areas; (ii) build networks between S&T and industry; (iii) change the organizational cultures and research systems; and (iv) encompass structured debates with wider participation, leading to the creation of common visions.

The theoretical and conceptual background that supported the strategic foresight framework adopted in this work was based on the following reference books: ‘The Handbook of Technology Foresight: Concepts and Practice’ (Georghiou et al., 2008); ‘Research Infrastructure Foresight: Practical Guide for Integrating Foresight in Research Infrastructures Policy Formulation’ (Keenan and Popper, 2007); ‘Global Foresight Outlook 2007: Mapping Foresight in Europe and the rest of the World’ (Popper et al, 2007); and ‘The Evolution of Strategic Foresight: Navigating Public Policy Making’ (Kuosa, 2012).

## **Innovation systems**

The concept of innovation system has been around for more than 20 years and today it has become widely spread among policy makers as well as researchers all over the world (Freeman, 1987; Lundvall, 1992, 2004; Edquist and Johnson, 1997, and OECD, 1997).

OECD (1997) presented several definitions for a national system of innovation as follows:

“.. the network of institutions in the public and private sectors whose activities and interactions initiate, import, modify and diffuse new technologies.” (Freeman, 1987).

“.. the elements and relationships which interact in the production, diffusion and use of new, and economically useful, knowledge ... and are either located within or rooted inside the borders of a nation state.” (Lundvall, 1992).

“... a set of institutions whose interactions determine the innovative performance ... of national firms.” (Nelson, 1993).

“.. the national institutions, their incentive structures and their competencies, that determine the rate and direction of technological learning (or the volume and composition of change generating activities) in a country.” (Patel and Pavitt, 1994).

“.. that set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and which provides the framework within which governments form and implement policies to influence the innovation process. As such it is a system of interconnected institutions to create, store and transfer the knowledge, skills and artefacts which define new technologies.” (Metcalf, 1995).

According to Lundvall (1992), there are several new concepts emphasizing the systemic characteristics of innovation but with focus at other levels of the economy than the nation state. They are: (i) ‘technological systems’ in the beginning of the nineties (Carlsson and Stankiewicz, 1995); (ii) regional systems of innovation (Maskell and Malmberg, 1997); and (iii) sectoral systems of innovation (Breschi and Malerba, 1997; Malerba, 2004); and (iv) triple helix-concept (Etzkowitz and Leydesdorff, 2000). Considering the objectives of the prospective study on global REI (focus of this article), we adopted the definition of Lundvall (1992) and agree with the assumptions established by OECD (1997, p. 13) as follows:

“For policy makers, an understanding of the national innovation system can help identify leverage points for enhancing innovative performance and overall competitiveness. It can assist in pinpointing mismatches within the system, both among institutions and in relation to government policies, which can thwart technology development and innovation. Countries differ in the way in which knowledge flows are structured and in the relative importance of different types of institutions, actors and linkages for their respective production systems”.

Strategic foresight – as a systematic, participatory process, collecting future intelligence and building medium-to-long-term visions, aimed at influencing present-day decisions and mobilizing joint actions – offers an essential tool for public policy formulation and corporate strategy formation. It helps in making choices in an ever more complex situation by discussing alternative options, bringing together different communities with their complementary knowledge and experience (EC DG Research, 2002).

## **Technology and innovation policy**

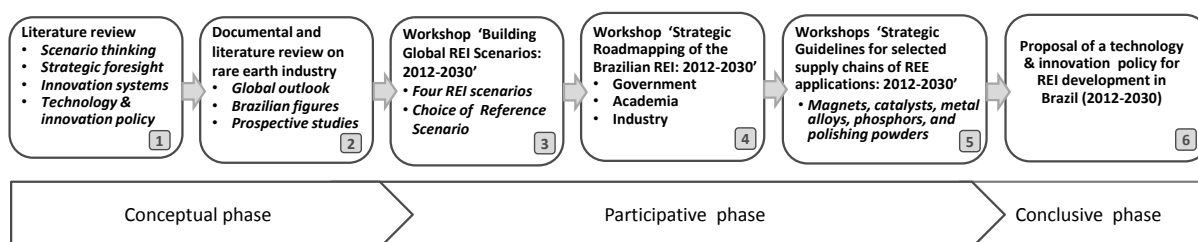
The relevant and potentially successful technology and innovation policies (adaptive ones), rely on, and learn from, feedback from the selection process to the development of further variation (Metcalf and Georghiou, 1998). In other words, policy formulation is increasingly becoming a learning process (Lundvall and Borrás,

1999; 2006). This notion underlines the importance of foresight programs, as in the case focused here: more robust policies can be devised when (i) alternative futures are considered, and (ii) participants with different background are actively involved in a decision-preparatory process, and thus bringing wide-ranging accumulated knowledge, experience, aspirations, and ideas in.

Technology and innovation policy pays special attention to the institutional and organizational dimension of innovation systems, including competence building and organizational performance (Lundvall and Borrás, 2006).

## METHODOLOGY

Considering the qualitative nature of the innovation system framework and the methods of analysis that were employed for scenario building and strategic foresight, the research focus was on qualitative results and insights. A schematic overview of the prospective study development is showed in Figure 1. It comprised three main phases: (i) conceptual; (ii) participative; and (iii) conclusive.



**Figure 1: Development of the prospective study: a schematic overview**

The conceptual phase encompassed literature review covering the research central themes and also documental and literature reviews on rare earth industry, including previous prospective studies and forecasting on global rare earth markets (for example, Roland Berger Strategy Consultants, 2011; and Alonso, 2012). Literature survey covered a number of sources for peer-reviewed scientific articles, such as Web of Science; Scopus; and Science Direct; and also the Internet, using the search engine Google Scholar.

In relation to the analysis of previous prospective studies and market forecasting on global REI, relevant documents were selected and reviewed with an attempt to: (i) mapping the driving forces that will influence the development of REI and the strategic (re)positioning of consumer countries with natural resources and S&T capabilities; (ii) identifying the main trends and critical uncertainties drawn from multiple scenarios; and (iii) identifying key issues concerning technologies advances, new business models and future industrial configurations.

In the participative phase, a series of workshops were held from May to July 2012, involving more than 60 experts from Brazilian government, academy, and industry. The first workshop, called 'Building Global REI Scenarios: 2012 – 2030', was held in Brasília in May 2012 with the following objectives: (i) to validate the partial results from the conceptual phase; (ii) to generate alternative global REI scenarios; and (iii) to choose a reference scenario for discussing the implications for Brazil strategic position in the future. The second workshop was held in Rio de Janeiro, in June 2014, aiming to: (i) validate the narrative of global reference scenario and the single RE's taxonomy for the strategic foresight; (ii) establish the future vision (2030) for REI in Brazil and identify main challenges that the country may face in two periods: 2012 – 2020, and 2021 – 2030; and (iii) build, collectively, the strategic roadmap for the development of REI in Brazil. The remaining workshops focused on the definition of strategic guidelines for the development of supply chains of five REEs applications, considered strategic priorities during the second workshop. Basically these meetings aimed to: (i) characterize, schematically, supply chains and propose their visions of the future (2030); and (ii) establish strategic guidelines to achieve the respective visions (permanent magnets, catalysts, metal alloys, phosphors, and polishing powders, including special glasses and lenses manufacturing). Finally, in the conclusive phase, the



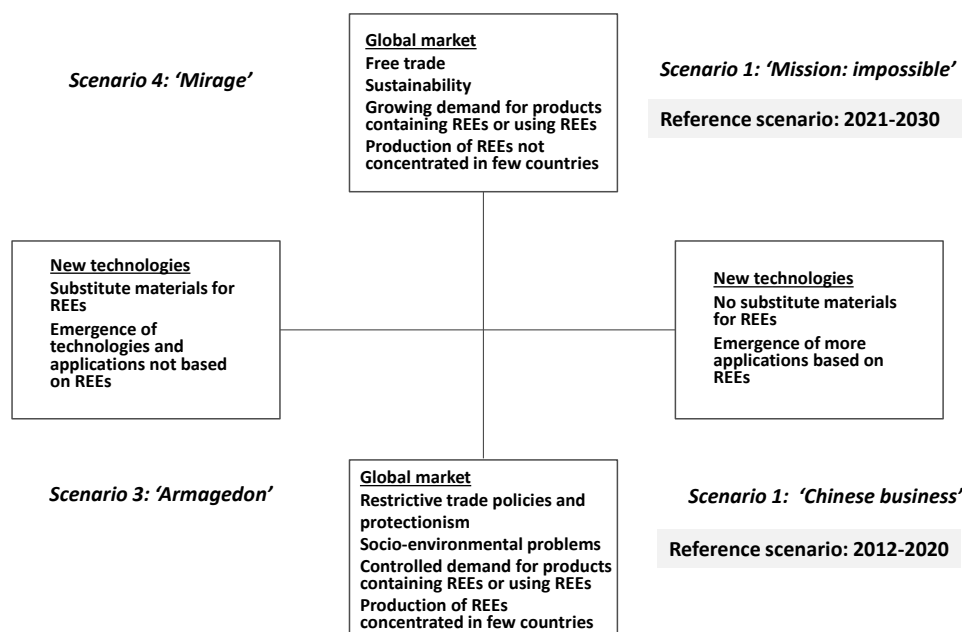
results of previous phases were consolidated in order to subsidize the proposal of a technology & innovation policy for the development of the REI in light of the framework designed by Lundvall and Borrás (2006).

## MAIN RESULTS

Four alternative scenarios of the global REI (2012-2030) were developed during the exercise and this allowed for the choice of a reference global scenario that would serve as the setting for the strategic analysis of the competitive position of Brazil in the global rare earth's arena. This subsection includes an analysis of the implications of the chosen reference scenario which led to the identification of important challenges that will be faced by Brazil during the periods 2012-2020 and 2021-2030.

A description of the four future scenarios associated with the diagram in Figure 2 included the following components: (i) philosophy, (ii) REI trajectory in the period 2012 – 2020, (iii) REI trajectory in the period 2021 – 2030, (iv) main actors, (v) plausibility conditions for materializing the REI trajectory in the period 2012-2020, (vi) plausibility conditions for materializing the REI trajectory in the period 2021-2030. A detailed description of the four scenarios can be obtained by contacting the authors or by request to the Center for Strategic Studies and Management in Science (CGEE) in [www.cgee.org.br](http://www.cgee.org.br).

**Figure 2: Four scenarios and reference scenario for global REI - 2012-2030**



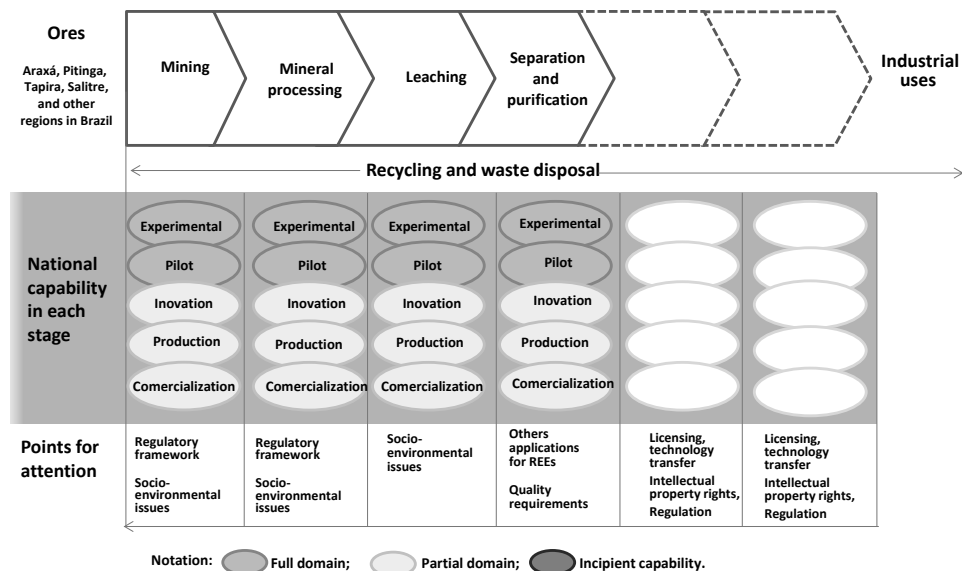
As showed in Figure 2, in the first period (2012-2020), we consider the logic of 'Chinese business' scenario, which emphasizes: (i) restrictive trade policies and protectionism; (ii) socio-environmental problems and legal claims; (iii) controlled demand for products containing REEs or using REEs; (iv) no substitute materials for REEs; (v) emergence of more applications based on REEs.

According to the reference scenario, policy changes and initiatives undertaken by countries with mineral ores containing REEs (the case of Brazil, among others) strengthen the strategic positioning of these countries. Partnerships with countries that dominate downstream activities of RE supply chain (technologies and processes related to clean energies, sustainable mobility, catalysts, phosphors, and others applications) will take place in the second period (2021-2030). Based on these assumptions, it is expected a break in the trend scenario 'Chinese business', with the entry of new players in the global RE market. Prevailing free trade and sustainability of the RE supply chain, with increased demand and supply of raw materials and products using or containing REEs.

## Strategic roadmapping of the Brazilian REI: 2012-2030

Based on the reference scenario assumptions and the strategic analysis of Brazilian position in the coming decades, we present the results of an assessment focusing on national capabilities for the development of upstream stages of RE supply chain (as represented in Figure 3), and also for downstream activities (not represented in Figure 3, but included in the foresight exercises for the prioritized supply chains of REEs applications).

**Figure 3: National capabilities in the stages of RE supply chain**



The future vision of the RE supply chain in Brazil (considering temporal horizon 2030) was collectively established and a set of strategic objectives to accomplish that vision were expressed focusing on the following issues: (i) global market for REE applications; (ii) reserves and production capacity of REEs in Brazil; (iii) public policies for the development of REI, at national level; (iv) regulatory framework focusing on exploration of strategic minerals, including rare earths, and socio-environmental issues; (v) investment and public-private partnerships for developing RE supply chain, as a whole, and also the supply chains of prioritized applications; (vi) basic infrastructure for RE supply chains; (vii) human resources and capabilities; (viii) technological domain on key technologies supporting upstream and downstream activities.

Finally, a strategic roadmap for development of REI in Brazil, including strategic guidelines for developing REEs applications, was consolidated by the foresight project team at CGEE (CGEE, 2014). The complete roadmap comprises a set of proposed actions for the periods 2012-2020 and 2021-2030, including deadlines and actors to be involved.

## Technology & innovation policy for REI development in Brazil (2012-2030)

We propose in this section a technology and innovation policy for the development of the rare earth industry in Brazil in light of the framework designed by Lundvall and Borrás (2006) and aligned to the National Strategy for Science, Technology and Innovation – 2010-2015 (MCTI, 2010). Before going any further, we present in Table 2 the results of strategic foresight as support to technology & innovation policy for the development of REI in Brazil (2012-2030), focusing on: (i) regulatory framework; (ii) infrastructure; (iii) human resources; and (iii) technology itself.

**Table 1: Strategic foresight as support to technology & innovation policy for the development of REI in Brazil**

Issue	Situation in 2012	Foresight for 2030
<b>Regulatory framework</b>	Current laws do not prioritize the production of REEs in a competitive, and sustainable way, with the necessary value added Restrictions on the production of REEs when associated with radioactive ores.	New regulation provides incentives for investments in production and prioritizes production of REs in a competitive and sustainable way. Environmental questions related to the presence of radioactive ores are dealt with by new laws .
<b>Infrastructure</b>	Law nº 10.197, provides financing to infrastructure implementation and modernization projects in universities and research centers New infrastructure for industrial and commercial activities is to be developed, due to new metallurgical projects and new applications.	Labs infrastructure is modernized in universities and research centers and in firms. Infrastructure in place for REEs production and industrial applications. Logistics bottlenecks in production and distribution are eliminated.
<b>Human resources and capabilities</b>	Existence of universities, research groups and research centers with competence in REs themes, but the number of research groups is still small when compared with China and USA. Part of previous specialists migrated to new fields of research due to lack of investments in REs in the period 1991-2010.	Continuous training of specialized workforce, aiming to avoid migration to other sectors, as happened before. Acquired technological competences are effective when facing technological challenges from REs applications considered strategic for the country.
<b>Technology</b>	Small budgets for the development of supply chains of REEs applications considered strategic for the country. End of patents validity creates new possibilities for production in Brazil and export of applications based on REs as well as final products containing or using REs.	Full technological competence in prioritized productive chains, from the mine to the final product containing or using REEs. Brazilian network for REs effective in research public and private centers, firms and universities. Good access to technologies allowing for free trade through international cooperation agreements. Joint-ventures among countries with known REEs reserves and others with competence in clean technologies for the production and processing of rare earth oxides.

Based on this strategic assessment, a technology & innovation policy was formulated with the involvement of representatives of government, academia and industry, with different backgrounds. Thereby, the prospective study and the foresight process achieved their main objective, i.e. to provide strategic guidelines for structuring a national technology & innovation policy for the development of REI in Brazil, covering the period from 2012 to 2030.

Particular emphasis for formulating this technology & innovation policy was given to the following issues: technological domain; regulatory framework; infrastructure; and human resources and national capabilities. Its scope covered the RE supply chain, as a whole, and also supply chains of five promising and strategic applications for the country. A full version (in Portuguese), including deadlines and actors involved, can be obtained by contacting the authors or by request to the Center for Strategic Studies and Management in Science (CGEE) in [www.cgee.org.br](http://www.cgee.org.br).

Table 2 presents a briefing of the technology & innovation policy for the development of REI in Brazil, limited to guidelines and actions for the period of foresight (2012- 2030).

## CONCLUSIONS

This article summarized the main results of a rich participative process of scenario building and strategic foresight, focusing on global rare earth industry. The reference scenario served as backdrop for designing the strategic roadmap for the development of rare earth industry in Brazil as a whole, and also for purposing strategic guidelines - vision and long-term objectives - referring to the productive chains of permanent magnets, catalysts, metal alloys, phosphors, and polishing powders, including special glasses and lenses manufacturing. Here, we reinforce here the importance of strategic foresight for an effective technology and innovation policy, because alternative futures were considered, and participants with different background were actively involved during the execution of the prospective study.

**Table 2: Technology & innovation policy for the development of REI in Brazil**

Issue	Strategic guidelines	Period 2012-2030
<b>Regulatory framework</b>	Approval of a new mineral law, which should guarantee special attention to specific aspects in the development of the RE supply chains.	To institute mineral rights as a possible guarantee when financing the implementation and projects related to vertical integration of RE supply chain. To deal with the approval of the new mineral law.
<b>Infrastructure</b>	To promote the implementation and modernization of an infrastructure for R,D&I in REs, as well as the modernization of the infrastructure dedicated to logistics. To consolidate infrastructural technologies (metrology, standardization, conformity assessment, including certifications) as support to RE supply chains' activities.	To map the major existing infrastructures for science and technology research in universities, research centers and firms, with special attention to their actual use, and build a profile of the demands from the REs areas. To disseminate information about the infrastructure for research, its locations, availability and usage conditions for rare earths. To support investments in infrastructure for R,D&I that will be available for common use by national institutions and firms in REs, through competitive bidding. To support infrastructure projects related to the creation of the Brazilian Rare Earths Network (see 'Technology') To implement public-private partnerships for enlargement and modernization of the infrastructure for technological services and logistics in all supply chains of REI. To promote the emergence of clusters and the creation of the infrastructures related to the REEs applications considered strategic for the country.
<b>Human resources and capabilities</b>	To develop the human resources needed in the implementation of the RE supply chains.	To implement master and doctoral scholarships oriented towards the development of theses, dissertations, scientific publications and patents on REs domains. To adapt high school and undergraduate curricula to cover knowledge areas considered fundamental to the development of human resources for the RE supply chains. To implement short- and medium-term <i>lato sensu</i> courses on the strategic importance of REs and the development of RE supply chains in Brazil. To implement international exchange programs dedicated to foreign and Brazilian specialists in knowledge fields relevant to RE supply chains.
<b>Technology</b>	To promote the technology development and innovation oriented towards the development of the RE supply chains, including prioritized applications	To implement a Brazilian Technological Program and the Brazilian Rare Earths Network, mobilizing firms, research centers, universities, government and other intermediaries. To implement special financing for R,D&I covering the earlier stages of RE supply chain (mining, mineral processing, leaching, and separation and purification of rare earth oxides), as well REEs applications for different industrial uses. To celebrate international agreements for increasing access to key technologies and creating the necessary conditions for free trade practices related to RE materials.

Essentially, the conclusion of the prospective study is that the sustainable development of rare earth industry in Brazil will require the review of regulatory framework of mineral resources, especially strategic ones, technological domain and collaborative efforts around key technologies of mineral processing and purification of RE materials, and also those related to permanent magnets, catalysts, metal alloys, phosphors, and polishing powders (including special glasses and lenses manufacturing).

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# HARNESSING VIRTUAL TEAM PERFORMANCE BY MANAGING CONFLICT

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## ABSTRACT

*This paper reports on a qualitative case study on conflict management in virtual teams in the software industry of South Africa. Virtual teams are common in the software industry, a main contributor to wealth creation. Failure is common, with conflict cited as a contributing factor. A purposive sample was selected, while data were collected through an electronic questionnaire and analyzed by means of content analysis. Empirical evidence suggested that conflict, with positive and negative consequences was managed within the team, preventing disharmony and supporting constructive disagreements between members; thus, facilitating team performance and competitiveness. This study contributes to the emerging body of knowledge on the effective functioning of virtual teams.*

**Keywords:** Virtual team effectiveness/performance; conflict management; flexible work practices; competitive advantage

## INTRODUCTION

The ever-changing environment in which firms operate heightens competition, while threatening the sustainability of firms. It is especially the pace of technological change and globalisation that intensifies competition (Liu, Magjuka & Lee, 2008). Of these changes technological development, specifically related to information communication technology (ICT), is the most important factor driving change (Hitchcock, 2012). Thus, to remain relevant, firms over the world are obliged to embrace ICT as a mode of participating in the global economy. Only firms which are able to successfully utilise ICT, as a means to shape competitive advantage, will secure their future by outwitting the competition in a globalised landscape. The development of new ICT enables flexible working practices of which the virtual team is an example (Brunelle, 2013; Ebrahim, Ahmed and Taha, 2009, McWhorter, 2010). Virtual teams are growing in popularity (Au & Marks, 2012; Bergiel, Bergiel & Balsmeier, 2008; Brahm & Kunze, 2012; Brunelle, 2013; Pazos, 2012), despite the fact that little empirical evidence is available about their performance (Ebrahim et al., 2009; Gaan, 2012; Ganesh & Gupta, 2010; Gressgård, 2011; Liu et al., 2008; Pazos, 2012).

Unanimous consent about the definition of virtual teams does not yet exist. However, for the purpose of this paper, a virtual team is deemed to consist of members who are geographically and temporally dispersed, come from different disciplines, departments, and sometimes from different organizations and nations, with a shared purpose, using computer-mediated communication technologies in collaborating to achieve a common goal, for which they are jointly responsible, as well as jointly for the relationships within the team (see Bergiel et al., 2008; Berry, 2011; Brahm & Kunze, 2012; Cohen & Bailey, 1997; Ebrahim et al., 2009; Gressgård, 2011; Guades, Hamilton-Bogart, Marsh, & Robinson, 2007; Lipnack & Stamps, 1993, 1994, 1997; Lojesky & Reilly, 2008; Martins, Gilson, & Maynard, 2004; Miles & Snow, 1986; Nemiro, Beyerlein, Bradley & Beyerlein, 2008; Pazos, 2012; Peters & Manz 2007; Piccoli, Powell, & Ives, 2004; Siebdart, Hoegel & Ernst, 2009). The implications of this description of virtual teams include that members are from different global locations and diverse backgrounds (multidisciplinary and multinational); membership terminates once the goal is achieved, making the team either non-permanent/short-lived and fleeting or more durable depending on the nature of the



task at hand; and members interact in a number of time/place configurations, providing flexibility and speed, all of which can potentially facilitate team performance. The nature of virtual teams has implications for (human) relationships, because of the context and, specifically communication, which in turn affects collaboration (Brunelle, 2013; Gressgård, 2011; Jarvenpaa & Leidner, 1999; Mihhailova, Öun & Türk, 2011). Consequently, the very nature of virtual teams raises challenges that must be addressed to ensure its successful performance (Au & Marks, 2012; Brahm & Kunze, 2012; Ebrahim et al., 2009; Furumo, 2009; Liu et al., 2008; Mihhailova et al., 2011; Pazos, 2012) and the organization's competitiveness in the market.

Of these challenges, interpersonal processes need to be addressed, in particular conflict. In virtual teams conflict arises as a result of an environment that is low in social presence (distance) and interactivity (technology mediated communication) (Furumo, 2009; Ganesh & Gupta, 2010; Gressgård, 2011; Jarvenpaa & Leidner, 1999; Liu et al., 2008; Pazos, 2012).

Although a universally accepted definition of conflict has not yet emerged, two main schools of thought about the definition of conflict can be differentiated. Firstly, conflict as disagreement (Bendix, 2010; Gross, Hogler & Henle, 2013), which according to Laursen and Hafen (2010) as well as Bouncken and Winkler (2010) may further manifest in incompatible or opposing behaviors or views. Hon and Chan (2013) suggested that conflict viewed as disagreement could have a negative impact in the workplace, where relationship-based conflict and stress generally result to negative outcomes for the employee and the organization. This view is shared by Santos and Passos (2013) as well as Smith, Arthur, Hardy, Callow and Williams (2013), who identified additional negative consequences of conflict as disagreement such as negative task cohesion and a decline of the likelihood of an agreement in a situation of conflict. Secondly, Burger (2013) described conflict as a process. This view is shared by Leever Hulst, Berendsen, Boendemaker, Roodenburg and Pols (2010) as well as De Wit, Greer and Jehn (2012). Leever et al. (2010) further state that the conflict process begins when one party perceives that he/she has been negatively affected by another party.

Conflict, whether as a result of disagreement or process or both, is inevitable in teams, particularly in situations with high ambiguity, high stakes, and extreme uncertainty as in the case of virtual teams (Pazos, 2012). Whether conflict is harmful or beneficial to organizational performance has not yet been resolved (Bisseling & Sobral, 2010). Several authors (Paletz, Schunn, & Kim, 2013; Riaz & Junaid, 2013) have noted the advantages of conflict, including better quality of group decision, increased innovation and creativity, and team effectiveness. Some evidence shows that conflict management (prevention and handling) plays a critical role in enhancing virtual team effectiveness (Furumo, 2009; Pazos, 2012). As such, conflict management has been recognized as a particularly critical process in the context of virtual teams (Pazos, 2012).

Conflict has been studied extensively, especially in face-to-face teams, but little is known about conflict in virtual teams (Pazos, 2012). It is postulated that existing theory about face-to-face teamwork processes may not be transferable to a virtual setting, because the dynamics of the group process may be different (Brunelle, 2013; Cottrell, 2011; Furumo, 2009; Gressgård, 2011; Jarvenpaa & Leinder, 1999). Due to the nature of a virtual team, conflict may be latent for a very long period, before it is observed due to a lack of physical prompts without being noticed (Griffith, Sawyer, & Neale, 2003; Pazos, 2012). On the other hand, it is argued by Gates (2013) that conflict and conflict resolution techniques, in particular, are amplified by technological conditions facing virtual teams resulting in efficiencies or inefficiencies being exuberated Given the limited knowledge about virtual teams and especially conflict management in virtual teams, authors call for further research (Chimhanzi, 2012; Ebrahim et al., 2009; Furumo, 2009; Liu et al., 2008; Pazos, 2012).

Virtual teams in general, and conflict in virtual teams specifically, have not yet been examined in South Africa (SA), neither has any research been done on the software section of the technology industry in SA (Louw-Potgieter & Nunez 2007; Mogale & Sutherland, 2010). The software section of the technology industry is one of the largest and most prominent high-growth industries in the world (Maheshwari, Kumar & Kumar 2012), contributing to the wealth creation of nations, especially in emerging economies. However, numerous accounts of failure in the software industry are available (Maheshwari et al., 2012). The software industry lends itself ideally to virtual teams, which are negatively affected by virtualness (Ganesh & Gupta, 2010). Software development is mainly a team effort, involving complex and inter-dependent tasks, interactions among the team members as well as stakeholders and the he various processes that bring the team members together

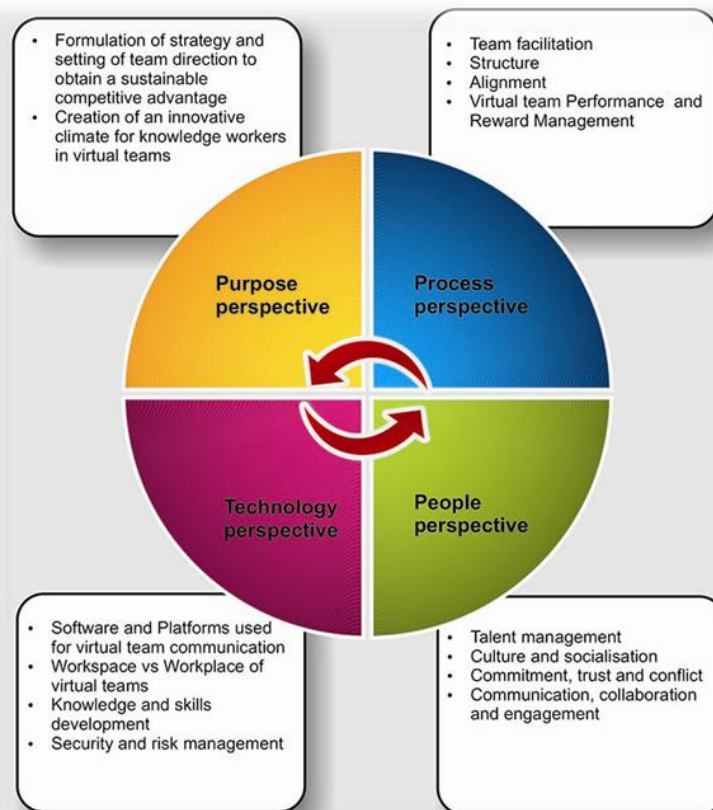
(Maheshwari et al., 2012). Hence, it is critical to understand conflict in virtual teams in the software industry to ensure effective functioning of the teams.

The purpose of this paper is to report on conflict management in virtual teams in the software sector of the technology industry in SA with a view of facilitating virtual team performance and enhancing the competitiveness of the organization in the market. The paper aims to add to the emerging body of knowledge on the effective functioning of virtual teams, specifically by addressing conflict management in virtual teams, in response to the call by Chimhanzi (2012), Ebrahim et al. (2009), Liu et al. (2008) and Pazos (2012). The study used the adapted (purpose as an independent perspective added to process, people, technology perspectives) framework for effective virtual team working proposed by Ebrahim et al. (2009). The paper is organized as follows: a brief overview of effective virtual team working focusing on conflict management is followed by the research design and methods, a presentation of the findings and ends with conclusions.

## Effective virtual team working

Ebrahim et al. (2009) proposed a framework for effective virtual team functioning based on a review of the literature. This framework is an extension of the work of Bal and Gundry (1999). This framework was adapted, for purposes of the study, based on the recurring themes prevalent in an extensive literature review, and reflected in the definition of virtual teams presented in the previous section. This framework is illustrated in Figure 1 below.

**Figure 1 Framework for effective virtual team functioning**



**Source:** Adapted from Ebrahim et al., 2009

Virtual teams have a particular objective, goal, purpose or direction (Guades, Hamilton-Bogart, Marsh, & Robinson 2007; Lipnack & Stamps, 1993, 1994, 1997; Nemiro et al., 2008; Staples & Cameron, 2005). The

purpose perspective in Figure 1 relates to the extent to which the objective is achieved, which in turn reflects the effectiveness of the team. The process perspective (fig 1) includes Team members exercising their roles and responsibilities and the way they approach their tasks, the processes followed in executing the tasks to achieve the purpose of the team and processes alignment. The people perspective (fig 1) refers to the degree to which problems are solved and team members interact, communicate and deal with differences. From the technology perspective (fig 1) the extent to which technology influences teams and in particular virtual teams, would be evident in team effectiveness. Conflict can arise in any of these perspectives, with a consequent adverse effect on team effectiveness and performance. Hence, all of these perspectives should act in concert to ensure team effectiveness. Communication plays a critical part in conflict prevalence in virtual teams (Furumo, 2009; Gressgård, 2011; Liu et al., 2008; Pazos, 2012). Hence, it stands to reason that communication between members serves to either facilitate or hinder team effectiveness. According to Gressgård (2011), efficient cooperation, by means of electronic media, depends on the existence of a shared understanding among the group members regarding the purpose, including a shared understanding of norms for collecting, sharing and using of information, division of work and roles/responsibilities, and the social context for interpretation of information. A shared understanding may not exist at the time when the virtual team is established. Thus, the creation of a common social platform for interaction and for the work to be carried out is essential, and both means and the extent of communication are fundamental for a successful construction of a shared understanding among the team members (Gressgård, 2011). As pointed out in the previous section, communication in virtual teams is hampered by low social presence, which contributes to conflict in virtual teams.

## **Conflict in virtual teams**

Conflict, an inevitable part of teams (Bisseling & Sobral, 2010; Cottrell, 2011; Liu et al., 2008), arises owing to differences in members' ideas, opinions and ways of doing things (Liu et al., 2008) or when team members perceive that their best interests are not served (Furumo, 2009). From the foregoing description of conflict, it is evident that conflict has two dimensions. One dimension is related to the task and another to relationships between members (Furumo, 2009). Task conflict involves differences of viewpoints relating to the task that needs to be performed, while relationship conflicts pertain to feelings of anger, frustration and distrust (Furumo, 2009). Task conflict pertains to the purpose perspective in Figure 1, while the relationship perspective relates to the people and process perspective in Figure 1. Technology, especially technology associated with communication between members, representing the technology perspective in Figure 1 is also involved in conflict.

Both task and relationship conflict can have a negative effect on team effectiveness and performance, unless it is appropriately handled (Furumo, 2009; Pazos, 2012). In the case of virtual teams, task conflict arises owing to disagreement on team goals and responsibilities (Gressgård, 2011; Pazos, 2012). Disagreement may manifest cognitively and/or behaviorally (Pazos, 2012). Behavior may not be obvious (Liu et al., 2008), as already indicated, and may be exacerbated by the uninhibited communication in the virtual team context (Gressgård, 2011; Martins et al., 2004; Pazos, 2012). Uninhibited communication may contribute to, especially, relationship conflict. Initially, such behavior may be interpreted as a means of achieving efficiency and effectiveness (Liu et al., 2008).

## **Conflict management**

Conflict management relates to a (virtual) team's ability to play an active role (a) in preventing conflict with inhibiting consequences before it emerges (pre-emptive), and (b) in resolving existing conflict (reactive) (Pazos, 2012). The former is known as conflict disagreement (Sonnentag, Unger & Nägel, 2013) and the latter as conflict process (De Wit, Greer & Jehn, 2012:360). Pre-emptive conflict management involves establishing conditions to prevent or guide team conflict before it occurs (Burger, 2013) while reactive conflict management involves working through disagreements among team members by utilising different conflict resolution techniques (Pazos, 2012). These techniques include mediation, conciliation and negotiation (Katz & Flynn, 2013:393-410).

In virtual teams, the potential conflict triggers relate to the purpose of the team, people practices, and processes and the technology motivated influence become more dominant (Ebrahim et al., 2009). Hence, all of

these aspects mentioned in the previous paragraph should receive proper attention from the formation of the virtual team (Liu et al., 2008; Pazos, 2012). In addition to purpose and role clarification, communication rules must be established from the outset of the virtual team (Griffith et al., 2003), as part of conflict prevention.

As for face-to-face teams, a number of conflict handling styles are available to virtual teams (Liu et al., 2008; Pazos, 2012). Cooperative conflict resolution techniques for both virtual teams and face-to-face teams, are associated with positive individual and team outcomes, more so than competitive techniques (Liu et al., 2008; Pazos, 2012).

It follows from the above exposition of conflict in virtual teams that all four perspectives of effective virtual team work, as presented in Figure 1, are to a degree interwoven. Conflict arises owing to ambiguity and/or disagreement about the purpose of the team, as well as the technology to be used to communicate, access and store information. Consequently, housekeeping protocols in connection with communication and collaboration should be in place before a member joins the virtual team (Algesheimer, Dholakia, & Gurău, 2011).

Moreover, processes should support the purpose of the virtual team and should be integrated between the organizational designs (virtual and face-to-face teams). In terms of the people perspective, conflict manifests itself as internal, intrapersonal and interpersonal (virtual team members, clients, network, manager of team, intra-organizational). Virtual team members use technology as a vehicle to discharge of their responsibilities, including their own development (Tannenbaum, Mathieu, Salas, & Cohen, 2012). Technologically mediated communication provides a source of potential conflict. The above explanation of conflict in virtual teams also supports the notions of conflict as disagreement and process. Furthermore, conflict relates to both task and relationships. The importance of preventing conflict with inhibiting consequences was addressed during the current study. Cooperative conflict handling styles are indicated as more conducive to team effectiveness than competitive styles (Wheeler, 2013).

## **RESEARCH DESIGN AND METHODOLOGY**

The study reported on here formed part of a larger study investigating best practices in the effective functioning of virtual teams in the software sector of the technology industry in South Africa. The research philosophy is indicated by the problem under investigation (Denzin & Lincoln 2013; Saunders, Lewis, & Thornhill, 2012). The purpose of the (main) study was to understand best practices in the industry in question, including conflict management. As such, the inquiry reported on was situated in an interpretivist research philosophy, with the emphasis on experience and interpretation (Richards & Morse 2013; Seymore 2012). The interpretive philosophy seeks to produce descriptive analyses that emphasize understanding of the phenomenon studied, rather than searching for broadly applicable laws (Denzin & Lincoln 2013; Richards & Morse 2013; Saunders et al., 2012). An interpretivistic research philosophy holds that knowledge is created (Seymore, 2012). This means that the understanding of reality is not a simple account of what is, but rather that insight needs to be obtained of how people in societies and groups interpret reality (Seymore 2012), from a subjective perspective.

The above explanation of the interpretivist philosophy alludes to the application of a qualitative research approach in collecting and analyzing data for this research (Denzin & Lincoln, 2013; Richards & Morse, 2013; Saunders et al., 2012). In this instance, the use of a qualitative research approach was appropriate to the purpose of the inquiry conducted. Furthermore, the qualitative approach was in line with the predominant research approach within the interpretivist philosophy (Denzin & Lincoln 2013; Richards & Morse 2013). The problem was studied by means of a qualitative case study (design), which was deemed appropriate to this inquiry as it explored a contemporary phenomenon in its real-life context (Denzin & Lincoln 2013; Marshall & Rossman 2011; Saunders et al., 2012; Seymore 2012).

The population in this study as per definition of Salkind (2012), comprised all the companies in the software sector of the technology industry of South Africa as listed on the Johannesburg Stock Exchange (JSE). To be practical and with due regard for time and budget constraints, a non-probability (purposive/judgment) sample was chosen based on the problem at hand (Salkind 2012; Saunders et al., 2012).

In total, 16 companies, comprising 13 JSE-listed companies and the three most significant software role-players in the international software industry (according to Forbes, 2009), were approached. No ideal sample size for studies using a qualitative approach has been established and guidelines are available for case studies. Myers (2009) suggested that one case suffices, while Eisenhardt (1989) proposes between four and 10 cases.

Data were collected by means of an open-ended questionnaire in a semi-structured data collection method and qualitative content analysis was used (Salkind 2012; Saunders et al., 2012). Questionnaires as a method of data collection are not uncommon in qualitative research (Fisher et al. 2010). Guiding and probing questions, to gain depth and insight into the experiences and views of virtual team members, were included to ensure the usefulness of the data collected (Fisher, 2010). Access to participating organisations was secured through consultation with gatekeepers, namely the human resource (HR) practitioners in the selected organisations (Kreitner & Kinicki, 2010).

A self-administered electronic questionnaire, using the Lime Survey 2.0+ tool, was used. Thus, the data collection method simulated the virtual teams' operating methods, namely virtuality. Participants expressed their preference for this kind of data collection method. The questionnaire was available via a web-link to the HR gatekeeper in the participating organisations. Participants completed the questionnaire in their own time using computers or smartphones. Lime Survey 2.0+ allows the researcher to design the questionnaire, electronically captures the data and has basic data analysis capabilities (Salkind, 2012; Saunders et al., 2012).

The questionnaire consisted of different question types with varying response formats, including multiple choice, text input, drop-down lists, numerical input, slider input, and simple yes/no input. Questions were arranged in a two-dimensional array, with options along one axis based on the questions on the other axis. Qualitative content analysis protocol was utilized in the formulation of the questions rooted in theory, as well as to code, categorize and thematically analyze and interpret the data from the participants (Richards & Morse 2013). In phrasing the questions, the categories namely purpose, process, people and technology were utilized to phrase the questions in order to explore the experiences of the participants. Each category and theme received an identification code, developed by the researchers.

Following the completion of the questionnaire, the data presented by the participants were downloaded to an Excel spreadsheet. An overall impression of the data was done before each analysis. The descriptions of the participants' perceptions and experiences of best practices in virtual teams provided data, which formed the basis of themes and categories regarding variables affecting best practices in the effective functioning of virtual teams in the software sector of the technology industry in South Africa. As such, the themes could be generalized, rather than generalizing laws from sample to population.

## **Strategies to ensure trustworthiness**

To ensure the scientific value of the empirical qualitative study, the researchers endeavored to follow the guidelines proposed by Guba and Lincoln (1989), Marshall and Rossman (2011) and Richards and Morse (2013).

To achieve credibility, the researchers entered into prolonged engagement with the assigned HR gatekeepers, through weekly contact either telephonically or electronically. Credibility in the questioning technique and researcher authority in the utilization of the data generation technique were achieved through the assistance from the qualified assigned university support staff to create the electronic questionnaire. Further, a pilot study of the questionnaire was conducted to test the questionnaire before distributing it to the sample. The information obtained from both the pilot and empirical research were verified, by both the researchers and the qualified assigned university support staff. A field journal was kept, and experiences during the research process were captured to increase reflexivity. The researchers obtained structural coherence of the data by utilizing the themes and aligning the questions with the research method. Member checking of this research occurred at two international conferences, to establish whether any important aspect in either theory or application had been omitted and whether the study was "fit for purpose". No misfits were identified. A three-tier triangulation process was utilized to enhance credibility of the study: theoretical, investigator and researcher-participant

triangulation. Multiple theories were utilized to phrase the research question. Data were cross-examined by three parties and deemed an accurate reflection of the information presented by the participants. Triangulation of information was obtained by utilizing both the principle of following more than one theory and source of data, and referential adequacy was achieved by citing the authors in the adapted conceptual framework (Guba & Lincoln, 1989; Pazos 2012). Referential adequacy was achieved in that all research utilized to formulate questions was cited in the study and noted in the bibliography of the study.

Dependability of this research was ensured as an audit trail of the process, coding procedures and data responses of each participant are available for audit purposes on Lime Survey 2.0+, but owing to ethical prescriptions purposes cannot be published in this article. Further, an Excel spreadsheet was used to download the information by an institutional software technician, and confirmation is available on request. Coding of question groups and questions was created automatically and electronically via the Lime Survey 2.0+ electronic questionnaire data collection instrument. Reasonable precaution was taken to ensure authenticity of the voices of all participants and companies who participated in this empirical study, and the original response document was verified by both researchers. The coding system of the researchers to link unique participants to a specific organization, as well as the industry's risk alert to secure usernames and password for participants' email accounts may be considered to have contributed towards to the non-occurrence of duplicate participants.

Ethical consideration as suggested by Saunders et al. (2013, p. 236) was utilized. Knowledge sharing was considered a great risk to the companies in the industry; therefore, the coding of the responses from particular companies and the participants were kept anonymous to respect their privacy and protect them against possible harm. The researchers did not at any stage coerce or incentivize the assigned company's human resource representative (gatekeeper) or participants to obtain access or obtaining information.

## **FINDINGS AND DISCUSSION**

### **Participation**

Of the 16 organizations initially approached to participate, four finally agreed to allow one virtual team each to participate. The most senior human resource professional in each of these companies selected the most effective virtual team based on their own selection criteria (which does not form part of this study). Operational availability of the virtual team members to complete the questionnaire was an imperious organizational consideration. The time frame from requiring access to the organizations to completion of the data generation period was eight months (4 February to 6 September 2013).

A total of 55 questionnaires, of which ten were useable, were returned, which is in line with the norm for qualitative case studies as pointed out in a previous section. Taking into consideration the nature of the industry and the nature of the questionnaire, the low response rate is acceptable (Saunders et al., 2012). The nature of the technology industry as experienced by the researchers is reflective of the true character of the industry: fluid and with little formal structure, usage of informal networks and associations and high talent turnover. A turnover of key staff was experienced as entrance to companies had to be re-negotiated several times. There was a very quick participant reaction, once the key role players (HR gatekeepers) requested participation.

Unlike many industries in South Africa, the technology industry is not formally structured, making it difficult to obtain reliable information regarding the role-players. The Johannesburg Stock Exchange (JSE) was therefore considered to be the most reliable indicator of participants in the industry as it represents listed companies that complies with specific criteria. The scope, extent and activities of international participants in the technology industry in South Africa, are speculative and have not yet been formally established. Hence the international indicators were utilized. A turnover of key staff was experienced as entrance to companies had to be re-negotiated several times. There was a very quick participant reaction once the key role players (HR gatekeepers) had requested participation.

One of the main organizational elements suggesting an area of conflict creation, relates to the remuneration practices between organizations and between individuals within organizations. These practices

among organizations and even within organizations are fluid and not standard. Although it was mentioned by a number of participants that they understood that their remuneration was above market expectations, a further contributing factor to conflict may be signaled by union membership as noted by two participants. Remuneration as cause of conflict was not prominent in the literature reviewed.

## **Processes influencing conflict in virtual teams**

With respect to conflict resolution, the team construction was central to the lessening and/ or prevention of conflict. Virtual team participants indicated a number of positive reasons for belonging to virtual teams, which underpinned the characteristics of these teams such as “every member is treated equal[ly] and can be trusted when using his own judgment in the particular situation”, “we are a group of likeminded people!”, “I have been working with them for 10 years and therefore know them well” and “all team members are available”. These statements indicate that the foundation of relationships such as trust, dependency and expectations are aligned.

The virtual team members had a throughout understanding of how the organizational design of a virtual team enables its functionality. The following accounts confirm the participants’ understanding: “Collaboration and communication and communication is [sic] varied over varied over multi-media and traditional meetings, and guidance is given, not by a single individual, but rather by various team members, depending on their subject-matter expertise” and “make use of technologies such as UCS, Live Meeting”. These multi-facets would in a face-to-face (FTF) team or conventional teams typically be the root of major conflict areas, but are experienced by virtual team members as enablers to function effectively.

The individual advantage of working within a virtual team supports theory with relation to the individual such as health, family matters, time management, personal space and comfort. The deep-rooted composition of these people, which requires them to seek knowledge, corresponds with another section of the questionnaire referring to their qualifications and the nature of their work and also with theory regarding knowledge workers, as indicated by the following statements: “I gain experience and knowledge from peers”, “easy access to intellectual property”, and “there is an abundance of knowledge from many different technology areas”. This also explains why it was so difficult to obtain access to information from these companies, as knowledge in this environment presents a competitive advantage in the market. Another dimension of the benefit for individuals to work in a virtual team relates to the removal from daily social interaction between colleagues in FTF team “politics” and the value that team members accord to “trust” where team members can practice “focus leading to quality” instead of focusing on relationship re-alignment.

## **Purpose establishment influencing conflict in virtual teams**

Six participants confirmed that purpose and formal role clarification were essential at the on-boarding phase of a virtual team. The best practice is to establish the initial task and role clarification in the forming stages of the group as well as with each new member joining the team subsequently. However, as the main feature of virtual teams is flexibility, the ability to adjust swiftly necessitates renewed purpose establishment each time the direction or the function of the team changes—Therefore, timeous purpose and role re-affirmation in virtual teams are critical for smooth transitions and reducing potential areas of future conflict.

## **People practices influencing conflict in virtual teams**

The majority of the participants indicated that communication in the team was imperative and specifically mentioned transparency in communication as a critical component of communication. Transparent communication was illustrated by responses such as “without communication, we will be working blindly, and not towards a common goal” and “if you don't communicate you can't function”. Meetings and social gatherings were viewed as a “waste of time”. A potential area of conflict highlighted by participants, was that membership of the virtual team should be based on skill and “not [be] result of politics”, which supports the notion that these participants valued knowledge rather than social affiliation. In this context, it is understandable that virtual team members valued “tighter management communication”, a strong focus on “measuring the delivery of the project rather than the process”, and the option to decide what is best for themselves and the team “based on function/project/solution, use the best fit framework (ITIL, COBIT, TOGAF) to fulfill responsibilities”. Trust,

tolerance, collaboration and involvement were highlighted as contributing to good working relationships, which is aligned with FTF teams and supported by the literature (Gressgård, 2011).

Virtual team members placed a high regard on specialized knowledge, for all activities associated with the team. Although the majority of members valued social interaction with others in the team, the formalized impersonal attachment to colleagues could be viewed as practice to lessen conflict in the team. It was noted that comments provided by the participants were very short, providing merely the critical information required and this form of communication is aligned across the companies, indicating a protocol of communication in virtual teams. Personal FTF intervention was only suggested where a member failed to perform. In no other function of the team was such intervention suggested, which supports the notion that virtual teams really do work virtually.

According to nine of the participants, leadership is not perceived as a requirement for effective virtual teams. In fact, some of the organizationally assigned managers had to indicate their official job title as manager, but did not explain their job content as managerial in nature (two participants). Participants referred to “team dynamics” and “clear goals” as better practices than the appointment of a team leader to harmonize team functions. Cultural differences in virtual teams were bridged by clarification of the individual’s world, work and people perspective from the on-boarding of the team (seven participants).

The greater number of participants identified ‘performance of team members’ as the primary cause of conflict in virtual teams. This was reflected by the following responses of participants: “members not delivering”, applying wrong skillset (person), and “incompetence of team members”. The participants’ impersonal reference to colleagues as opposed to “a qualified person” was noted. As knowledge in virtual teams is particularly valued it is not surprising that all the participants indicated the selection criteria for a virtual team as “specialist” knowledge as opposed to experience or other criteria (such as the main focus of the legislation to influence recruitment practices through legislation).

## **Technology practices influencing conflict in virtual teams**

The availability of technology infrastructure was noted as the greatest cause of conflict and should be corrected if not in place. Only three participants indicated that a virtual team could work without technology. One participant suggested working on a cell phone and the other qualified their statement by saying only for a short period, in the absence of computer technology. The qualifying statements of two of the participants reflected that a computer is viewed as a technology enabler and that virtual teams really need technology to work meaningfully. The only practice perceived by the team as worthwhile to stay updated with was collaboration tools (nine participants). This implies that organizations pursuing successful implementation of virtual teams need to realize that expenditure on up-to-date custom collaboration tools will be a necessity.

## **CONCLUSIONS**

The empirical evidence has revealed that conflict do surface virtual teams in the software sector of the technology industry in South Africa. Conflict in the four virtual teams studied was linked to the four perspectives of effective work in virtual teams as proposed by Ebrahim et al. (2009). Responses of participants suggested that conflict with both positive and negative consequences was encountered, supporting the literature that conflict may be beneficial (Riaz & Junaid, 2013; Paletz et al., 2013). It was reported that conflict arose owing to remuneration practices, non-performance of team members and the availability of technological infrastructure. These causes of conflict were not dominant in the literature reviewed.

Conflict may be prevented by ensuring formal role clarification at the onset, and reaffirming it with changes owing to the flexibility of the work. Members should be selected on the basis of the skills needed to complete the project. Trust, based on prior knowledge and experience of team members, was noted as another conflict prevention mechanism. Collaboration and communication, using a variety of multi-media, were indicated as enablers of effective team work. These factors are congruent with the literature. Distance was shown to prevent conflict, which is contrary to the literature. The use of formalized, impersonal attachments to colleagues was reported as the main means of coping with the handling of conflict. This observation is at odds with the literature.



The responses to the empirical studies alluded to the fact that conflict as disagreement and process was prevalent in the participating teams. The empirical evidence closed the gap in terms of conflict management in virtual teams in the software sector of the technology industry of South Africa. Although a small number of companies and team members participated in this study, the number of respondents complied with the norm for qualitative research and specifically the case study design.

The best practice to deal with the primary cause of conflict in a virtual team is noted as “individualised mediated FTF discussion where previous virtual interventions failed”. Meaningful engagement by appointing the “right skills set” to the team was highlighted as reducing tension in the team. Finalising general housekeeping as to the electronic communication beforehand greatly reduced conflict later on. Hence to be effective, it is recommended that virtual teams heed these best practices.

Three main limitations of this study were identified: The literature research was only conducted on scholarly peer reviewed articles and books in the English language which implied that articles outside this language was excluded. The return rate of the study was low due to the access restrictions by the organisations in the form of Human Resource gatekeepers. Despite the gatekeepers, the study met the findings of Saunders (2012), who indicates a benchmark of 30% as an acceptable response rate for electronic surveys. Thirdly, empirical research should ideally be collected by means of an interview, focus group or individualised email as the more appropriate research methods to address this research question. However, given the virtual nature of the phenomenon under investigation, working in harmony with virtual team members, namely electronically, to obtain descriptive information, the length and the questions within the questionnaire may have contributed towards the complexity of the questionnaire. Regardless though, the questionnaire was received as trustworthy but could be shortened if researchers only wish to focus on a single theme or element, which could attract a greater response rate.

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# EU AND CHINA REGIONAL POLICY

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## ABSTRACT

*The European Union and China are characterized by large economic regional and social disparities. Regional policies of both parties date back to the 1950's and both are facing similar problems and challenges in this area. Thus, regional policy has become crucial not only for their competitiveness but also in terms of their international dialogue and exchange of acquired experience. In 2004 at the EU - China Summit, the area of regional policy was identified as a subject of common interest and scope for sharing experience and established methods from practice. The aim of this paper is to outline the main trends in the field of regional policy of the European Union and China. The paper examines the basic principles of financial and institutional framework, as well as the priority areas for regional policy support. The paper further defines both regional policies, identifies similar areas of interest and the associated scope for sharing experiences such as sustainable regional development, economic competitiveness, scientific development, economic and social development of the population, the environment, etc.*

**Keywords:** Regional policy, European Union, China

## INTRODUCTION

China is currently struggling with problems stemming from the substantial differences between the economically booming coastal regions and underdeveloped regions in the western part of the country. Problems of these regions are arising in relation to the traditional heavy industry which has been falling behind, but there are also problems with income inequality between traditional rural areas and prosperous urban areas. In the 1970s China started a reform effort that helped develop the potential of coastal areas and gave rise to prosperous areas of the Pearl River delta and Yangtze Jiang river delta, and coastal area Circum - Bohai Sea (CBS), which later became the drivers of China's economic growth. Conversely, at the same time, Sichuan, Jiangxi, Shaanxi, Guizhou, Shanxi, Ningxia and Gansu province more backward regions with lower incomes and slower economic growth. Northeastern provinces are primarily facing a problem of low competitiveness in agricultural and industrial sector, as well as high unemployment rate. These, a few decades preceding factors, have been the main causes of the enormous regional disparities in China (Inspiring non - EU Countries - EU - China, 2012). The issue of regional disparities in the European Union (EU) is one of the main themes of this integration group since its very inception in the 1950s, and especially after signing of the Single European Act in 1986. EU has invested a lot of financial resources in mitigation and elimination of regional disparities. Long-term regional and structural policy at the EU level brings this integration group with the greatest experience in this area from around the world. This knowledge is further shared in the framework of the EU – China dialog.

Since 2006, when the Memorandum of Understanding and Cooperation in the field of regional policy was signed, a closer cooperation between the EU and China in this field has been carried out. Cooperation organization and knowledge transfer in the field of regional policy between the EU and China attains the form in the following ways: both sides nominated a high-level official, and created point of contact of the European Commission (DG Regio) and the National Development and Reform Commission of the People's Republic of China. If necessary, working groups can be set up. Their purpose is to address the specific concrete tasks. It was determined that every year, at least one meeting between the representatives of the participating parties will be held (Memorandum of Understanding, 2006).

# EU REGIONAL POLICY

## History of the Regional Policy of the EU and Its Basic Principles

Regional Policy of the EU has its origins back in the Treaty of Rome in 1957. This year, the European Economic Community was established. In 1968, regional policy was institutionally roofed, the Directorate-General for Regional Policy was founded (History of the policy - Regional Policy, 2012). In the 1970s the integration efforts slowed down because of the oil shocks and structural crises. This is also linked with smaller efforts to promote regional policy and less public interest in the policy at all. The revival is coming up in the 1980s when relatively poor and underdeveloped countries - Spain, Portugal and Greece accessed this integration grouping. These so-called peripheral economies became a burden on the common European budget. Member states recognized the need to address this situation and thus the regional policy gained its importance in this period. In 1986 the Treaty of Rome was supplemented by the provisions on regional policy by signing the Single European Act, and for the first time the concept of "economic and social cohesion" was adapted since the Community establishment. The Single European Act also established the cohesion policy as one of the main objectives of the Community. Cohesion policy is currently one of the main EU priorities and over one third of its funds are being spent on it from the EU common budget (Regional Policy, 2012). EU regional policy is based on several basic principles that are already very well known by now i.e. partnership, coordination, decentralization and complementarity.

## Financial Framework of the EU Regional Policy

EU regional policy is based on a seven-year financial frameworks. Funds are always divided into individual years ahead and for individual support areas. For the programming period 2007 – 2013 the regional policy budget was set for € 308 billion. The distribution of funds to individual years is shown in Table 1, and the distribution of funds by individual regional policy objectives is shown in Table 2.

**Table 1: Financial perspective of the EU regional policy in 2007 – 2013 (in billions of EUR)**

Year	2007	2008	2009	2010	2011	2012	2013	Total
Financial support	42,863	43,318	43,862	43,860	44,073	44,723	45,342	308,041

Source: Financial framework EU 2007 – 2013 (online), 2012.

Distribution of NUTS II regions under the different objectives of the regional policy is very important in terms of the possibility of drawing finances from the EU structural funds. The rules for drawing these funds depend on the relative development of the region:

- Objective 1 - Convergence - NUTS II regions are supported within this objective. Their GDP per capita is less than 75% of the average economic level of EU-27. Furthermore, this objective is relevant for the drawing the funds for the entire countries, whose GNP per person is less than 90% of the average economic level of EU-27.
- Objective 2 - Regional competitiveness and employment - supported regions through this objective are NUTS II and NUTS I, which do not qualify for the inclusion under Objective I.
- Objective 3 - European Territorial Cooperation - promotes cross-border cooperation between regions NUTS II and NUTS III, which are located in the coastal border (Fund of the European Union [online]).

**Table 2: Financial means allocation according to objectives in 2007 – 2013 (in billions EUR)**

Objectives	Financial support
Convergence	283
Regional competitiveness and employment	55
European Territorial Cooperation	9
Total	347

Source: EU Cohesion Funding - Key Statistics, 2012.

For the current programming period 2014 – 2020 the European Commission for Regional Policy proposed total amount of EUR 330 billion, i.e. there was a slight increase in funding available for regional policy. The distribution of funds in each year for the current programming period is shown in Table 3.

**Table 3: Financial perspective of the EU regional policy in 2014 – 2020, in 2011 prices (in billions EUR)**

Year	2014	2015	2016	2017	2018	2019	2020	Total
Financial support Head. 1b	44,678	45,404	46,045	46,545	47,038	47,514	47,925	325,149

Source: European Council, 2013.

The distribution of funds for each area are depicted in the Table 4. The EU regional policy recorded substantial changes in the programming period 2014 – 2020. In this context it is important to note that there has been a significant adjustment in the classification in cohesion policy regions, and there have been changes in the rate of co-financing and in the rules for drawing financial resources from the EU structural funds. In the current programming period, we have been distinguishing the following three types of the regions:

- Less developed regions - their GDP per capita is less than 75% of the average EU-27. These regions are a priority of cohesion policy in this period.
- Transit regions - their GDP per person is less than 90% of the average EU-27, but more than 75% of the average EU-27. This category contains approximately 51 regions with more than 72 million people. It is expected that approximately 20 of these regions will move to this category from the current category Objectives I - Convergence (corresponding to the new category of less developed regions).
- More developed regions - their GDP per capita is higher than 90% of the average EU-27 (Czech Savings Bank, 2011).

**Table 4: Allocation of financial resources of the EU regional policy in 2014 – 2020 (in billions EUR)**

Regions	Financial support
Less developed regions	164.279
Transit regions	31.677
More developed regions	49.492
Member states supported by the Cohesion fund (10 billion € reserved for CEF)	66.362
Farthest regions (the Canary Islands, Madeira, etc.) and sparsely populated regions of Scandinavia and Austria	1.387
European territorial cooperation (6.327 billion € for cross-border cooperation; 1.822 billion € for transnational cooperation; 0.5 billion € for interregional cooperation)	8.948
Total	330

Source: Krutílek et al., 2013.

The current programming period also sets a rule stating that there will be at least 25% of the regional policy funding redeployed from the European Social Fund.

## Institutional Framework of the EU Regional Policy

Institutionally, the cohesion policy of the EU, is backed by the Directorate-General for Regional Policy (DG Regio), which was established within the European Commission in 1968. This DG is primarily responsible for managing the European Regional Development Fund (ERDF), the Cohesion Fund (CF) and the Instrument for pre-accession assistance. DG Regio aims to "provide efficient and effective structural policies which, ... directly contribute to creating the conditions for a successful enlargement of the European Union and in accordance with the principle of sound financial management" (Directorate-General for Regional and Urban Policy, 2012). Furthermore, the European Parliament is also involved in the institutional management of cohesion policy, through the Committee on Regional Development (REGI) and the Committee of the Regions. Besides, Economic and Social Committee is participating in this area as well.

Since the cohesion policy is a policy at the EU level, i.e. coordinated, it has also been largely coordinated at national or regional level. The regional and structural policy is therefore also backed by institutions at the national level.



## **Priority Areas for Support of the EU Regional Policy**

The EU set out several major areas of support in the field of regional policy during programming period 2007 – 2013 which were supported through the European Regional Development Fund. Under the Convergence objective it aimed at strengthening infrastructure, economic competitiveness, research, innovation and sustainable regional development. Under the Regional Competitiveness and Employment it was innovation, the knowledge economy, environment and risk prevention, improvement of transport and telecommunications equipment. The supported activities by the European Social Fund in this period were as follows: increasing adaptability of workers, improving access of the population to employment and the labor market, reinforcing social inclusion and facilitating market access for disadvantaged groups, combating discrimination and employment reforms (Working for the regions: EU Regional Policy 2007 - 2013, 2008).

Financial support in the new programming period 2014 – 2020 is aimed at a limited number of priorities: competitiveness and transit regions, energy efficiency, renewable energy, SMEs, competitiveness and innovation (Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Budget for Europe 2020, 2011).

## **REGIONAL POLICY OF CHINA**

### **History of the Regional Policy of the China and Its Basic Principles**

The origins of the regional policy of China falls to the 1950s, similarly as in today's EU. The original strategy of regional policy, under the leadership of the central government was focused on the balanced development of all regions of China until the reforms in the late 1970s. Due to the then geopolitical division of the world Chinese regional policy of the 1950s was heavily influenced by the Soviet model. First, it was the development of backward inland parts of the country with the help of a uniform distribution of industrial production and investment support. This strategy was associated with a tense situation in the world and an effort to strengthen the country's defense. During the Third and Fourth Five-Year Plan, from mid- 1960s to mid- 1970s, the investment reallocation prevailed in favor of inland regions. Investments were made in the south-western areas in infrastructure development and industrial companies. During the Fourth Five-Year Plan (1971 - 1975) a regional economic system was created. It divided the country into ten regions. Each region, the province and the city managed a separate industrial and economic system reflecting local characteristics. Another significant milestone in the regional policy occurred in the late 1970s. The need for change was related to the reform of China's opening to the world and to the transition from a centrally planned economy to a social market system. The investments to the coastal zones were again in the forefront of interest (EC, 2010). Since the 1990s the development strategy heads towards the coordinated development, particularly of underdeveloped regions, in order to reduce the differences between different parts of the country. The policy of opening to the world has had a positive impact on the central and western regions, they received the same support and benefits as were the coastal regions (Gao and Tong, 2008). However, the economic growth and attractiveness of the eastern regions in terms of capital inflows prevailed (Guo, Lu and Gan, 2002). The economic reforms were reflected in an influence reduction of the central government on administration and resource redistribution (Wei, 2002). It resulted in a greater autonomy of local governments in the area of decision making about further economic development. This enhanced their work in developing the appropriate regions. On the other hand, the coordination between regions became more difficult, and unbalanced economic development in different parts of the country led to a greater widening gap between regions. In response to this situation the central government of China proposed a strategy for the development of the western region, the restoration of the northeastern region and raise the central area, so that the differences between the various parts of the country are gradually eliminated (EC, 2011). However, the above mentioned increasing influence of local governments may have a negative impact on the allocation of central government funds for regional policy in China and thus can lead to favoring certain regions over the others (ICEC, 2012).

### **Financial Framework of the EU Regional Policy**

Coordination of regional development of China is ensured by financial and tax policies, including transfer payments, tax benefits or financial assistance. Many of the policies are based on preferential basis. The direct government investment policy plays an important role. It includes special financial funds which support regional development and certain investments of local governments. While the special funds are used to support economic and social development of older people, children, border and poor regions, the government budgetary investments (direct investments, subsidies and discounts) are directed to areas that are handled by the market with difficulties and where the presence of the state is needed. These include ensuring public welfare, infrastructure, environment, projects to promote economic and social development of backward regions and projects supporting the development of technology and high-tech industrialization (EC, 2011). Table 5 contains an example of allocation of the state budget to funds for investments in fixed assets. The data reveal that the central government financially strengthened the western region of China over the last decade. The average annual investment in fixed assets from the state budget was in the western region around 30 %, while in the north-eastern region it was 27 %, in the central 26% and in the eastern 22 % (Lu and Deng, 2011).

**Table 5: Regional allocation of the state budget to funds for investments and fixed assets in 2000 – 2010  
(in billions RMB and % share)**

Region		Eastern China		Central China		Western China		Northeast China		Unallocated region	
Year	Total	RMB	%	RMB	%	RMB	%	RMB	%	RMB	%
2000	159.41	40.75	25.56	32.90	20.64	41.33	25.93	11.56	7.25	32.87	20.62
2001	205.23	50.21	24.46	37.74	18.39	52.57	25.61	18.10	8.82	46.61	22.71
2002	252.36	45.09	17.80	43.42	17.14	86.72	34.23	17.34	6.84	60.79	23.99
2003	210.32	51.33	24.40	40.82	19.41	81.35	38.68	16.67	7.92	20.16	9.58
2004	325.50	80.39	24.70	65.21	20.03	109.40	33.61	24.77	7.61	45.74	14.05
2005	415.43	99.74	24.01	82.51	19.86	136.54	32.84	37.41	9.01	59.32	14.28
2006	467.20	98.42	21.06	101.92	21.82	154.77	33.13	47.42	10.15	64.67	13.84
2007	585.71	129.82	22.17	142.88	24.39	188.11	32.12	65.36	11.16	59.53	10.16
2008	795.48	186.90	23.50	194.87	24.50	263.16	33.08	81.43	10.24	69.12	8.69
2009	1268.57	176.64	21.81	310.27	24.46	497.76	39.24	123.09	9.70	60.80	4.79
2010	1467.78	303.00	20.64	348.96	23.77	603.94	41.15	127.65	8.70	84.23	5.74

Source: Lu a Deng, 2011.

Another financial instrument is the banking policy and its related loan system. Three banks in China are responsible for development financing: State Development Bank of China, Agricultural Development Bank of China and the Export-Import Bank of China. All provide finances for government projects supporting the development of underdeveloped regions. Regional development has been so far mainly financed from public spending and lacks the greater involvement of the private sector - investments (EC, 2011).

In addition, there is a system of interregional mutual aid in China, such as Hand-in-Hand Aid or Counterpart support. It creates a relatively long-term cooperation between developed and less developed regions. The assistance is focused on the economic and social development (infrastructure, education, technical assistance or direct equity investments, etc.). The policy of interaction between eastern and western regions is another alternative to the above mentioned and enables easier inter-regional flow of factors of production (Lu and Deng, 2011).

## **Institutional Framework of the EU Regional Policy**

China's regional development is driven by three mechanisms: state politics, local politics and global changes (Wei, 2002). Regional policy is managed at several levels, it is therefore referred to as multi-level governance consisting of a central government, provinces, districts, administrative areas and villages. Although Chinese regional policy has recorded some successes (e.g. reducing the gross regional product differences between West and East, the West was in 2003 about 63 % poorer than the East, but in 2009 it had fallen to 55.2 %; or reducing the gap between the incomes of households in urban and rural areas which has occurred since 2006) it is still hampered by weak institutions and lack of their mutual coordination (ICEC, 2012).

These shortcomings were partly removed during changes occurring in the Chinese economy over the past few decades, when there was also a transformation of governance in regional policy and the central government was forced to respond to new circumstances. After the reforms of the central government in 1998 and following mergers, there was a further reduction of existing institutions and ministries in 2003. Regional development and planning is now therefore backed by the National Development and Reform Commission, which formulates and implements strategies of national economic and social development (NDRC, 2013), as well as by the Ministry of Land and Resources (MLR, 2013) and by the Ministry of Housing and Urban-Rural Development. The last ministry was formed after the reorganization in 2007 – 2008, and currently covers activities related to the development plans of urban, rural areas and construction associated with them (USCBC, 2013). All of these institutions are mandated by the State Council, respectively by The Central People's Government.

## **Priority Areas for Support of the EU Regional Policy**

China's objective in its regional policy is to promote the growth of urban centers as well as to help rural areas to increase productivity, hence income. The objective of economic and regional development is to reduce poverty within next ten years, which is coupled to a five-year economic plans. The last two plans remain relatively consistent. Since the beginning of the 11th Five-Year Plan, China has focused more on scientific development, with an emphasis on coordination of economic and social development and population, resources and environment (EC, 2011). Just as in the 11th Five-Year Plan in the current 12<sup>th</sup> Five-Year Plan, the Chinese government decided to support the development of inland areas (western, central and northeastern) and optimizing the use of land. The new strategy, however, comes at a different approach to the eastern areas that are no longer divided into specific economic zones (SEZ), but to the sub-regions. Three sub-regions will play the main role in the coming years: Ching-Jinji (Beijing, Tianjin, Hebei) and deltas of Yangtze Jiang and Pearl River. The urban planning policy and development of urban areas is processed more in detail as well. The distribution of cities in 21 groups (mega cities, large and medium-sized cities, large and small cities) together with a migration plan from rural areas especially into large and small cities are also part of this policy plan (Sano, 2011).

The nearest Chinese regional policy objectives include: management and control of regional disparities, ensuring same basic public services in all regions, full use of the comparative advantages of each region, increasing the overall competitiveness and coordination of the regional economy, society, resources and environment (EC, 2011).

## **CONCLUSION**

For over half a century the regional policy of the EU and China has been creating an integral part of their planning of economic activities in the area of balanced economic development. Regional policy of the two economies have undergone a lot changes. The 1970s and the subsequent period were the most significant milestones influencing and leading to the formulation of modern regional policy. For the EU economy it was the accession to the southern European countries and for China a wave of reforms, including the policy of opening to the outside world.

In terms of regional policy funding, EU defined a seven-year financial framework. China has also set a longer time horizon that corresponds to its five-year economic plans. However, both economies have decided to have a decade-long program to eradicate poverty. EU and China divided their territories into smaller units, which facilitates the distribution of funds, both within the NUTS EU or regions in China. In the current programming period (EU 2014 – 2020 and China 2011 – 2015) both economies increased funding to the policies and changed the region classification. In the example of China there is a quite large involvement of state banks within the financing of development policy. Although, China's regional policy is under the umbrella of the Central People's Government, its activities are further divided between the National Development and Reform Commission and other two ministries. The policy is also implemented with financial and tax policies and is maintained at lower levels of governance. Though improving, yet still weak, cooperation of responsible institutions complicates the

identification of specific resources spent on the development policy of China. This area thus provides room for future improvement.

The EU cohesion policy is primarily backed by the Directorate-General for Regional Policy, which manages two funds (ERDF and CF) and provides pre-accession assistance. The management policy is also involved in the European Parliament and its selected committees. The individual states play their irreplaceable role as well. Their activities are coordinated by the aforementioned institutions. Although, today's regional policy of China was moved to lower levels of governance (as well as to individual villages) in comparison with the EU (NUTS III), it lacks a greater involvement of a civil society and NGOs. In terms of setting out the primary objectives of the regional policy of the EU and China there can be found several similar areas of interest such as regional sustainable development, economic competitiveness, scientific development, economic and social development, population, environment, etc. Therefore, there is a scope for dialogue and experience sharing.

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## ENDNOTE

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# **MANAGING DIVERSITY IN A VOLATILE ENVIRONMENT: WOMEN IN UPPER RANK POSITIONS**

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## **ABSTRACT**

*The development of new corporate governance codes calls for boardroom and top management diversity. Nonetheless, a lack of diversity in organisations is a worldwide situation that may vary from one country to another. This suggests that rather than relying upon established economies as a guideline, a more rounded understanding may emerge from studies that also explore a wider range of countries. This paper examines the varieties of top management diversities, particularly the barriers and challenges women faces in management positions. It considers the grounds for an integrated approach to under-representation of women in upper rank positions, and explicates concerted efforts to improve board room diversity.*

**Keywords:** women, top management, glass ceiling, soft-skills, contribution, environment, Panama, career development, directors

## **INTRODUCTION**

Whilst early research on women in top management has focused on the under-representation of women in upper rank levels (Burson-Maersteller, 1977; Kanter, 1977), others have addressed this issue based on the barriers women faced and their different roles in society (Burke, 1994; Burke and Mattis, 2000; Catalyst, 2000). Nonetheless, a body of research carried out to analyse female representation in upper rank levels reveals that lack of equality remains a reality in many countries showing the persistence effect of these invisible barriers (Pomeroy, 2007; Pichler *et al.*, 2008; Morrison & Von Glinow, 1990). Therefore, many researchers have continued to monitor this issue worldwide (Burke and Mattis, 2000; Catalyst, 2012; Davidson & Burke, 2011), and through the foundation of organisations such as Catalyst, statistics and numerical data is frequently presented to monitor the advance of gender diversity amongst large companies. These studies clearly acknowledge that boardrooms remain dominated by men. Regardless, the participation of women has slightly increased over the past 15 years. Women hold 16% of board seats and only 4.2% are appointed as CEO (Catalyst, 2013). Yet, existing data (Vinnicomeet *et al.*, 2008; Burke, 2000; Davidson & Burke, 2011; Daily *et al.*, 2000; Zelechowski & Bilimoria, 2004; Vinnicomeet *et al.*, 2000) are focusing on larger economies in developed countries and little has been written about developing countries in this context.

As a result of recent increases in studies on this topic, researchers have shifted their investigative perspective towards the influence of women in the organisation; the differences in leading styles; how these women have been able to shatter the “glass ceiling”; and how the organisation’s idea towards the management capabilities of women have changed over time. (Moore & Buttner, 1997; Kelly & Duerst-Lahti, 1995; Offerman & Beil, 1992; Jamieson, 1995; Rosener, 1995; Eyring & Stead, 1998) Eyring and Stead (1998)

conducted a project in an effort to understand and analyse the first organisations that created programmes to increase female participation in senior positions. The participants who successfully managed to integrate women into leading positions stated that their organisations were benefitting from a variety of management skills, and concluded that if an organisation wants to increase female participation, they need to focus on transforming their corporate culture, human resources practices, the development of succession programmes, training and development programmes, and flexible schedule practices. Eyring and Stead's (1998) findings align with others who agree that the *glass ceiling* is developed within corporate culture, and the only way to shatter it is through a transformation in top management perspectives. If top managers have a closed vision (thinking that only men are capable of leading), a culture of inequality is created and a corporate culture may begin, albeit passively to encourage gender discrimination. Similarly, Tharr-Whelan (2009) argues that all biological differences had in fact become key strengths amongst women and their inherent 'soft-skills' allow them to perceive and approach corporate situations differently, combining a people and task oriented culture with risk awareness to contribute to long-term success and competitive advantage. (Helgensen, 1990; Rosener, 1990; Cassell, 1997) However, much like the research based on female underrepresentation in upper rank positions, studies on the influence of women in organisations are limited to developed countries.

Nonetheless, a lack of diversity in organisations is a worldwide situation that may vary from one country to another. This suggests that rather than relying upon established economies as a guideline, a more rounded understanding may emerge from studies that also explore a wider range of countries. In Latin America's case, Brazil (the seventh largest economy in the world) has provided a predominant focus for gender-diversity research. However, general diversity in boardrooms and executive suites is a worldwide necessity and is accepted by some a mixed group of talented executives working together will enhance the organisation's competency by harnessing skills across the top positions of the company. This can have a direct influence on the corporation's performance. Furthermore, in light of the recent financial crisis bankruptcy of organisations like World.com and Enron were attributed to a lack of management in boardrooms and a failure to augment diversity (Arfken, et al., 2004). Moreover, recent changes to corporate governance codes have created an opportunity for women to be seen differently. Lars Thunell, the IFC's CEO suggests: *"If Lehman Brothers were actually Lehman Sisters, the company never would have gone under"* (Lamont, 2011) Mr. Thurnell (2011) suggested that 'women are biologically designed to be more careful, more cautious and more willing to scrutinise data when they prepare for board meetings. Therefore, women's appointment as board members should not be seen simply as part of an inclusion program. On the contrary, male CEO's and board members should evaluate the benefits the corporation will obtain from a diverse group (Burke, 1997). For example previous studies suggest that women's unique role in boards is showed through their participative management style (Pearce & Zahra, 1991), their ability to provide strategic input and generate more productive discourse (Bilimoria, 2000) and their sensitiveness when compared to their male counterparty (Bradshaw & Wicks, 2000). Then, the combination of women's ability with their unusual management style, considering others' needs and situations could naturally drive women to tackle strategic nature issues that concern the firm and its stakeholders (Nielsen & Huse, 2010).

However, the role of women in top management positions has been getting increased attention (Daily et al, 1999; Nielsen & Huse, 2000). But, studies have failed to establish a link between women's presence in top management positions in developing countries. Consequently, studies are needed to evaluate women's situation in developing countries such as: Mexico, Panama, Argentina, Chile and Costa Rica. Because of the limited literature about upper echelon dynamics surrounding women in top management positions in Panama is notable. As such, this study will show how some women in Panama have succeeded in top management positions. Combined with a male director perception, the research develops an understanding of how they have done so, and what their contributions to the organisation have been.

## THEORETICAL FRAMEWORKS AND CONTEXTS

The glass ceiling is a term used to refer to an invisible barrier that restricts the promotion of females or minorities in organisations because of their sex or race (Catalyst, 2000; Federal Glass Ceiling Commission, 1995; Simpson and Altaman, 2000; Meyerson and Fletcher, 2000). This term appeared 18 years ago in 1986, when two Wall Street journalists introduced it as a metaphor to explain the position of women in the business

world (Hymowitz & Schellhardt, 1986). Since then it has been explored through research seeking to deconstruct current biases in the business world.

Since 1986 researchers have been trying to identify the transparent barriers that limit female career advancement. Most studies argue that gender inequality is the most salient barrier (Catalyst, 1999; Cotter *et al*, 2001; Burke, 2003). On the other hand the term has also been defined as any hindrance women might face in their career development. For a barrier to be considered as part of a perceived set of glass ceiling limitations the limitation should be identified in the upper levels of management. The Federal Glass Ceiling Commission states “...this unbreakable barrier keeps minorities and women from rising *to the upper rungs of the corporate ladder*, regardless their qualifications or achievements”. Only when a constant constraint is identified, can it be considered a glass ceiling effect (Federal Glass Ceiling Commission, 1995; Cotter *et al*, 2001; Oakley 2000).

In the United States, women represent 57% of the total workforce. However they are still underrepresented in boards of directors and in senior positions (Catalyst, 2000). Oakley (2000) has developed three main theories that explain the lack of women in top-level management positions. She pointed out these transparent barriers in an effort to decrease their impact. The barriers are:

**Company practices in recruitment, retention and promotion.** Orellano and Miller (1997) specified that the three aims for succession planning in an organisation are “*to identify the critical management positions, identify the possible vacancies in those positions and the managers that might fit in them*” (Orellano and Miller, 1997; Shaefer, 2007). However, succession and promotion are amongst the firmest barriers for female career advance, arising from a lack of training opportunities for women and because many key opportunities are traditionally appointed to men. Such opportunities are essential to gain key competencies and to demonstrate leadership. Poor training is another obstacle for the advancement of women in the corporate ladder as they are considered essential for achieving potential. (Burke & Mattis, 2000)

Catalyst (2013) High Potentials in the Pipeline: on the way to the boardroom report stated the importance shareholders are giving to diversity in the board. The report showed that there is an ample supply of “ready now” women to fill current openings on corporate boards. However, the pipeline, young professionals getting prepared to fill a future board position, remains highly competitive because of women lack of opportunity to be appointed to the required line positions or “hot jobs”. This report’s findings supports Oakley’s (2000) perspective that in order to be appointed as a potential CEO, business knowledge is required and these “hot jobs” are more likely to be given to men; thus limiting opportunities for women to progress to the next level. (Catalyst, 2013; Burke, 1996; Burke, 1997). The development of new corporate governance codes calls for boardroom and top management diversity. It is, thereafter the responsibility of to meet the requirements of the role if their aspiration is to be taken into consideration in a boardroom position context. Any deviation from this can jeopardise their opportunity to be considered within the talent pool for succession programmes (Catalyst, 2013; Bilimoria & Zelechowski, 2003).

Another barrier in the corporate world that limits female advancement is inequality in compensation. Nowadays, women remain underpaid even when performing the same role as their male counterparty (Blau & Kahn, 2007). According to Catalyst’s (2013) report on women’s earnings and income, most studies have established that the difference in pay is not linked to a gender bias, but is instead a consequence of career interruption amongst women due to their family role (Kolb *et al*, 2004; Hegewish *et al*, 2011; Blau & Kahn, 2000). However, the gap exists even when both (men and women) have the same academic preparation, as shown in Table 1.

On the other hand, Mincer and Polachek (1974), Becker (1985) and Fuchs (1988) suggest that the wage gap is not a result of gender bias, but a consequence of women lack of human capital (Hatch and Dyer (2004) defined human capital as the combination of knowledge and skills in people (human resources), and the outcomes of the development of these resources (i.e. business experience, learning, and specialisation) and the level of commitment and parenting responsibility shared between men and women.

Even when the family factor is not taken in to account, the wage gap exists (Wood *et al*, 1993; Weinberger, 1998). Although, in some cases gap differences could be influenced by business experiences or qualifications, it is driven by the stereotype that women are more likely to retire early because of their family



role, and therefore, promotions and successions that could be a key factor for wage increases are likely to be appointed to men (Wood *et al*, 1993; Weinberger, 1998).

**Behavioural and Cultural Issues.** Cassell (1997) claimed that women in key positions can be associated with long term company success and competitive advantage. It is also argued that the distinctive set of skills women bring can add value and moreover, can create a culture of inclusion by diversifying the workforce (Green and Cassell, 1996; Shultz, 1995; Thomas, 1990). Therefore, because women have a different approach to leading organisations, men are more likely to perceive these differences as weaknesses thus limiting their advance. For example, a senior female director will rarely take a decision without taking into consideration the effects on the counterparty (Rosener, 1990; Helgesen, 1990). From a woman's perspective the toughest barriers in the corporate ladder are the ones based on behavioural aspects; whilst males perceive that the barriers that affect most women are the ones created by corporate policies and career development (Oakley, 2000).

**Table 1.** Earnings by Degree and Sex, adapted from Catalyst (2013)  
Women's Earnings and Income Report.

EARNINGS BY DEGREE AND SEX			
Degree	Median weekly earnings, women	Median weekly earnings, men	Variance (%)
Doctoral	1,371	1,734	26.5%
Professional	1,415	1,836	29.8%
Master's	1,125	1,515	34.7%
Bachelor's	930	1,199	28.9%
Associate's	682	880	29.0%
High school graduate, no college			30.0%
	554	720	
<b>Total</b>	6077	7884	29.7%

Even though both types of barrier exist and affect the career development of women, they are more likely to be excluded due to cultural and behavioural aspects. For example, if a woman is qualified to be appointed as a CEO, but the current male CEO has some preconceptions regarding her managerial style (i.e. is too soft, or too aggressive) or if she has the necessary skills to fulfil the job (i.e. a male gendered task job); as a result, women probabilities to be taken in consideration decreases. (Heilman, et al., 2004).

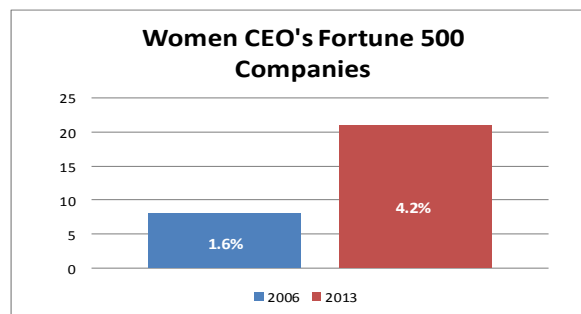
Behavioural aspects could be categorised into double blinds, gender and communication styles, gendered based stereotypes, preferred leadership styles, old boys' networks, women and power, and tokenism in top management circles. Every single aspect is grounded in how "weak or soft" women are perceived when compared to their male peers. Moreover, every behavioural aspect is based on biological gender differences. For example, stereotypes rooted in the feminine style or the way male corporate culture pushes women to emulate their behaviour. However, if women try to change their soft attitude and copy their male peers, it is then perceived as "too aggressive" (Heilman, et al., 2004). The corporate world has become a battlefield in which women have to fight every day to be accepted and to succeed in their own ways. Additionally, when a woman is appointed to an upper level position, she is exposed to continuous scrutiny whereby, she needs to demonstrate she has the capabilities to perform the job. For example: the way they talk; if the clothes they wear are too 'male' or too feminine; if they are too compassionate or too authoritarian. (Offerman and Beil, 1992; Jamieson, 1995; Tannen, 1994; Gilligan, 1982; Rosener, 1990)

Furthermore, for years it has been perceived that male managers have created an environment in which no matter how women behave they have always been misinterpreted (Heilman, 2001). Evidence suggests that some men have created this environment in an effort to maintain their "status quo" or what is known as the "old boys' club network". As an example of this, Lipman-Blumen (1976) defined the "old boys' club network" as an informal social system that expanded within the organisation. It is a community that excludes women and males who are considered less dominant. Nonetheless, in the past 20 years women have managed to break through these barriers, increasing their presence in top management positions and as a result, male executives have increasingly recognised the contributions that women can make to improve organisational performance (Nielsen & Huse, 2010). Hence, it could be assumed that women underrepresentation in top management is a result of the persistent existence of gender stereotypes (Heilman, 2001).

On the other hand, there is the perception that the appointment of women to senior positions such as CEO or board member simply satisfies quotas. Kanter (1977) argues that when a woman is appointed to a top management position, not because of her academic ability or business experience but to fill a position as a representation of gender, it is considered tokenism that arises out of the need to meet a quota for top positions in boardrooms. However, other studies agree that all these behavioural differences in fact benefit and enhance organisational performance thus enabling women to be considered for senior positions (Bass and Avolio, 2006; Rosener, 1995; Helgesen, 1990).

The recent financial crisis has been linked to a lack of management in boards of directors and to the “Old Boys Club Network” hence expanding shareholders vision to take in consideration women executives (Branson, 2012). Then, all the previously perceived differences as “weaknesses” have become women’s strengths, creating a balance within the organisation, and therefore, the new corporate governance codes insist on the creation of diversity not only focus on gender diversity but the increase of minorities as well thus creating a balance environment and enhancing the decision-making process. Since the year 2006 women participation in executive roles has increased from 1.6% to 4.2%. However, women progress in top positions still shows a slow trend. (Figure 1)

Figure 1. Women CEO's Fortune 500 Companies.  
Adapted from Catalyst Report (2006:2013)



**Structural and cultural explanations rooted in feminist theory.** According to Oackley (2000), there are two feminist theories; the radical and the liberal. Both of these have sought to reduce the dearth of women in top management positions. The liberalist theory that has been trying to create change within the existence corporate policies instead of transforming the core problem. This theory has failed to close the gap. On the other hand, the radical theory endeavours to improve the situation by identifying the core problem. This theory suggests that women are not heard in corporations even when they occupy a senior management role and this is mainly due to existent stereotypes.

Ultimately, each career barrier is based upon “gender inequality”. Since women and men are different biologically, socially and culturally, and due to the fact that upper corporate levels have always been male dominated, women need to prove themselves disproportionately to be considered for an upper level position (Weyer, 2007; Oakley, 2000; Catalyst, 2000).

Male domination in the corporate world has facilitated the emergence of ceilings to stagnate the advance of women. Carnes & Radojevich-Kelley (2011) study has determined that it is no longer a matter of qualifications, experience or limitations due to family responsibilities. The ceiling is based on preconceptions and stereotypes driven by the way male executives are used to managing. Even women in CEO roles or as members of boards of directors have slightly increased in number compared to twenty years ago when the concept of the *glass ceiling* was introduced. However, there is still a long way to go to fully eliminate this issue and for both women and men to be considered equals in the workplace. Therefore, for the purpose of this study, the glass ceiling will refer to any barrier that limits or stagnates the advance of women in management. The definition includes minorities and refers to ethnicity, colour, culture and religion amongst others. The definition only applies to the gender biases. This study defines “gender biases” as every action taken in the corporate world that limits the advancement of women when compared to men.

## Women and the Corporate World

The Civil Rights movement was the standpoint of women having or trying to have the same rights as men. This included access to voting rights, education, health and equal opportunities at work. So far, equality in the workplace remains a battle women have not yet won completely. Although their presence is around 50-60% of the total labour force, women have not broken through the various barriers to achieve top management positions. Some 49 years following the Civil Rights Act of 1964, the workplace remains male-dominated in upper-rank positions. (Women's International Center, 2013)

The increased representation of women happened around 15 to 20 years ago and this change was a result of external factors such as globalisation. The continued development of economies towards industrialisation coupled with the growth of the service sector and the political and legal initiatives of developed countries serving as a role for emerging and non-developed countries to promote gender equality, have opened a whole new range of opportunities for women. Today, the change in corporate governance codes that insists upon adherence to boardroom diversity has led to an increase in the potential for women to reach top managerial positions. However, the percentage of women in the boardroom and in other executive positions remains low (Davidson & Burke, 2011). Shriver (2009) argues that four years ago (2013-2009) half of the United States total workforce comprised of females and due to this phenomenon the phrase "female nation" was born highlighting the fact that this new group of women would change American society. Catalyst (2013) confirmed that by 2012 the trend in the US was that almost 52% of women held managerial and other related positions. This increment changed the role that men and women used to play in society. For example, being a mother is no longer an obstacle to being a successful professional and in some cases women earn more than their male counterparts. However, when comparing the annual remuneration of women to men who performed the same position usually women are paid less (Shriver, 2009).

On one hand, studies support the view that there is no "glass ceiling" and that women have made considerable progress in breaking into top position. There is an argument that gender barriers are not a consequence of the stereotypical role of 'women at home' (Tharenou, 1999). Mrs Careleton Fiorina the first woman to be appointed as CEO stated that "*women faced no limits whatsoever; there is no glass ceiling.*" (Meyer, 1999; Sheridan, 2002 p.209) In addition, Schonfeld (1994) states that women's participation in graduate business schools has also increased, leaving little reason as to why women should not ascend to executive and director positions. Also, an increase in the number of women occupying lower and middle positions should be seen as a talent pool that could lead women to advance to uppermost levels.

As Tharenou (1999) argues today's family responsibility has completely changed. In comparison to 20 years ago, men and women work an equal amount of hours and in some cases women earn a higher salary when compared to their husband. Even in some very specific and particular cases the husband does not work. (Shriver, 2009; Davidson & Burke, 2011; Davidson & Fielden, 2003). The career development of the "post-traditional" woman is not limited to family responsibilities. Since this is the case for US women, it may be a reality in other economies and may create an "invisible barrier".

Otherwise, there are studies that state there are cultural and behavioural differences that make women a threat to men in the workplace, not because men feel women are more capable than them, but because having a woman in an upper rank position will drastically change their current "status quo" and their interpretation of what counts as unity, stability and harmony in the boardroom (Bradshaw and Wicks, 2000; Burke, 1996; Powell, 1999). Upper level positions have been dominated by white men for more than 20 years. Through the years men have created an elite group (an "old boys club"), and as a result, men appointed to senior positions will share similarities within the existent group like age, skin colour, previous experience and social status. Initially, these similarities could be seen as coincidence but after a period of time it may be obvious they have created an elite group that could only reach senior positions at the expense of women and other men that do not share the same characteristics. (Oackley, 2000; Burke, 1996; Powell, 1999; Bradshaw and Wicks, 2000; O'Neil, Hopkins and Bilimoria, 2008)

The creation of this elite group is justified by the fact that men try to build and maintain "cohesive teams" through unity, stability and harmony. But this interpretation is debatable, primarily when the main role of

boards is to be objective in their decision making processes. If executives are surrounded by similar people there is no space for debate or other opinions in the decision-making process. This way of thinking, rather than being perceived as “cohesive” could be construed as an effort to coerce people in to doing what the leader wants to do. The presence of women on boards challenges the “Old Boys Club” paradigm completely. Diversity in the boardroom generates healthy debates and opens up opportunities to exchange different views towards the success of companies. As a result, it reduces the margin for risky decisions (Konrad, Kramer and Erkut, 2008; Tarr-Whelan, 2009; Davidson & Burke, 2011). Although Mrs Fiorina (HP CEO) said, it is probable that if women stop thinking they will not be able to succeed after getting to a middle management position due to possible “gender barriers”, such women will be committed to work and will overcome challenges to eventually reach an upper level position. In other words, when obstacles are perceived as opportunities, this “ceiling” becomes thinner and can become easy broken.

Welch and Welch (2006) disagree with Mrs Fiorina’s view. They argue that if there is no ceiling, it is odd that the ratio of women named as CEO remains low as does the talent pool of women. As mentioned earlier, introducing new people to the board will create fresh and different perspectives on situations, thus representing a threat to the male dominated boardroom. Women in upper levels are perceived as threats and men have underestimated their potential in an effort to protect their status quo. Men have based the underrepresentation of women in their biological differences and have perceived the sensitivity of women as a reflection of weaknesses that restricts the capacity of women to address a company decision in the best way (Sheridan, 2002; Bilimoria & Zelechowski, 2003; Davidson & Burke, 2011; Morrison, White and Velsor, 1987, Cannings and Montmarquette, 1991).

A lack of corporate vision to generate diversity in upper levels has been considered as one of the reasons that led some companies to fail in the previous 2007 financial crisis. Schwartz (1992) stated that having talented women in the workplace has led them to hire the best people for leadership positions, and to provide opportunities for male executives who have gained experience working with successful women. Diversity develops a balance within the organisation that produces an environment of equality amongst male and female employees and this increases employee satisfaction. When a company gets rid of “gender bias” and decides to develop all talented employees, it ensures that managerial positions are filled with strong individuals that will not jeopardise the organisation (Burke and Cooper, 2006; Hogan and Hogan, 2001; Fulmer and Conger, 2004).

Then, even though male-executives have been advised that an organisation’s performance benefits from diversity, the challenge to be gender-inclusive remains (Burke, 1997). Catalyst (2013) suggests that by 2012 only 4% of women held a CEO position based on the Fortune 1,000 Companies list, and 16% held board of directors’ seats. If women are well prepared with the requisite business experience to be appointed to upper rank positions they still need to visibility in the company (Ibarra, et al., 2010). Stimmler (2006) argues this exposure is gained not only through strong mentoring, but also through sponsorship. (Ibarra *et al.*, 2010) A woman aspiring to be appointed to a top management position does not need to emulate a man’s behaviour, yet she needs to develop certain skills that will grow alongside the support of a good mentor (Stimmler, 2006; Davidson & Burke, 2011; Rosener, 1990; Bilimoria & Zelechowski, 2003, Burke and Mattis, 2000b).

However, mentors usually do not hold positions of influence, thus creating the necessity for a sponsor who is commonly a senior manager with influence who can boost careers and provide necessary visibility to scale in the corporate ladder (Ibarra *et al.*, 2010). Therefore, the ability to find a good mentor and sponsor is considered as one of the main reasons why women and minorities are not taken into consideration in talent pools and therefore why they remain viable for top management positions. According to McDonald and Westphal (2013) women and minorities are affected by poor mentoring primarily because male executives with business experience that could serve as role models most of the time do not want to act as mentors or sponsors for women since there is a preference to teach people ‘the way things are’ in an attempt to preserve the “Old Boys Club” status in the boardroom and in executives positions (McDonald and Westphal, 2013; Helfat *et al.*, 2007; Hillman *et al.*, 2007; Terjesen *et al.*, 2009; Burke, 2000).

In terms of the mentoring process, McDonald & Westphal (2013) suggest that in order to benefit from mentoring it is necessary to be part of an “inner corporate elite” regardless of gender and it is necessary to create business relations with the right senior executives. Sheridan (2002) confirmed this perspective and suggested that to enter into the corporate elite one must grow business relations. Male success in the corporate world is not

entirely related to technical knowledge and men tend to focus on their status and material success (Sturges, 1999). For example, if men go to a football game or for dinner they do not need to be accompanied because they will start to make new connections that will probably help them in the future (Powell, 1999). Women measure their success by focusing more on personal recognition, accomplishment and achieving balance within their lives, thus limiting their ability to expand their networks. It can therefore be difficult for them to enter into the inner corporate elite or any other business group (Sturges, 1999). After thoroughly reviewing existing research, it appears plausible to state that one limitation relates to connecting women with an appropriate mentor, hence restricting exposure to opportunities for being taken into consideration for future positions. This study suggests that it is each executive responsibility whether is a woman or men to develop a well-known reputation amongst senior managers. Therefore, it is perhaps not a result of a barrier that there are fewer women in the top management pipeline, but a result of a lack of appropriate connections (Bilimoria and Piderit, 1994; Helfat *et al*, 2007; Terjesen *et al*, 2009; Kesner, 1988).

The ability to create connections is a barrier created by women. To eliminate thoughts that there are actually barriers that do not allow women to grow is the first step towards building a successful career. It is through these connections that they enter into the inner corporate elite and eventually, are given consideration for future opportunities. Like Mrs. Fiorina said, women create most barriers in the business world themselves and if they if they change this perception then perhaps the ceiling will disappear. Today's changes in corporate governance codes have acted as the "tipping point" for an increase of women into top management positions and boardrooms. However, there is still a disparity between women and men in appointments to CEO positions. As one of them said to have the opportunity to be appointed as CEO or to other executive positions, presents an opportunity to demonstrate that qualifications, experience, biology and cultural or behavioural aspects are no longer barriers to success for women who want to lead organisations.

## **MANAGERIAL IMPLICATIONS AND FUTURE RESEARCH DIRECTIONS**

The findings of this study describe perceptions of the glass ceiling as it related to women in management in Panama. It provides a new insight into women's indirect roles with implications for organisational performance and growth. Women's experiences were supported by one male director and his perceptions of a glass ceiling situation in Panama. The findings of this study will favour the young women and the ones undertaking higher education studies to realise that what is really preventing them from succeeding in the corporate world is their own attitude towards their career development. In addition, universities that have developed programmes to develop managerial skills in their under and post graduate students should focus on the important key issues identified within the six themes to empower women and to stop viewing them as genetically different from men. Universities programmes should focus on strengthening their natural soft skills which are almost always considered as weaknesses and they should seek to encourage them to compete for top management positions using their combination of soft and hard skills as a base. This new generation will be supported by the current women of "generation Y" whose presence in business schools surpasses the 60% mark. They consider themselves as "very ambitious" women. In addition, further studies should focus on an insider perspective and a subjective position that brings out the reality each woman faces (perhaps through statistical analysis) in management roles and in top power positions to ensure that the growth of women in such positions is not, as Catalyst (2013) states, "slow". Moreover, further research should focus on investigating the quantification of the contributions found in the Influence theme. For example, carrying out surveys in companies led by women directors could identify the perceptions of staff regarding leadership. Such research could explore if staff performances have improved and why, or if the firm's values have increased and why. On the other hand, further studies should investigate the "support system" influences found in the Environment and Social Programmes themes. For example, if executive women are to be considered for a senior position but they have family responsibilities these women may reject the opportunity. In this case, companies should be aware of this kind of situation and should develop appropriate programmes which allow any executive to compete for senior positions without affecting their personal interest. In addition, the government of each country should take part in these programmes and could develop "quotas" that could facilitate the advancement of women into senior positions. Finally, further studies should use this research as a guide to better understand women's behaviour and perceptions from their own perspective and experiences thus realising that the ceiling can be removed.

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# **INFRASTRUCTURAL TECHNOLOGIES AND INNOVATION IN THE DEFENSE INDUSTRY IN BRAZIL**

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## **ABSTRACT**

*The aim of this paper is to contribute to the understanding of the role of infrastructural technologies in supporting innovation within the defense industry in Brazil. Particularly, this work seeks to answer how defense firms perceive the importance of innovation in their economic activities and discuss how infrastructural technologies - metrology, standardization, technical regulation and conformity assessment – can strength their innovation capabilities. The methodology comprises: (i) literature review on innovation systems and national infrastructural technologies as a basis for discussing the role of metrology, standardization, and conformity assessment in strengthening innovation capacity of DIB's firms; (ii) documentary review covering public policies designed for restructuring the Brazilian defense industry and strengthening technological and innovation capabilities of firms that integrates the DIB; (iii) definition of the research scope, the analytical framework, and the primary data source - the Brazilian Survey of Innovation (PINTEC), published by the Statistical Office (IBGE); (iii) data collection and analysis; (iv) discussion of main results and formulation of conclusions and suggestions. The main results can be summarized as follows: (i) identification of PINTEC items directly associated with infrastructural technologies;(ii) identification and analysis of DIB firms' perceptions about innovative activities; innovation impacts; sources of innovation; cooperation relationships for innovation; problems and obstacles for innovation; and organizational and marketing innovations; and (iii) discussion on DIB firm's perceptions from the perspective of the role of infrastructural technologies in supporting their innovation capabilities.*

**Keywords:** Infrastructural technologies; innovation systems; defense industrial base; DBI; PINTEC; Brazil.

## **INTRODUCTION**

Over the last decade, the defense industry has obtained relevance on Brazilian public policies. The main normative document of this movement is the National Defense Strategy (NDS), approved by Act N. 6.703/2008 (Brazil, 2008), which brought up a new conception of defense for the country. The NDS established defense industry revitalization as one of three structural axes for the Brazilian defense, along with the reorganization of the Armed Forces and its new personnel policy. Besides the NDS, one of the sectors prioritized by the National Strategy for Science, Technology and Innovation – 2010-2015 is defense (Brazil, MCTI, 2010).

In recent years, the ongoing revitalization of Brazilian Defense Industrial Base (DIB) has been focused in government documents and legislation, but also has been taking place in the productive sector due to demands of Ministry of Defense. In fact, recent data indicates that in 2013, Brazil has the 12th largest defense procurement budget in the world.

From this perspective, it is necessary that the country holds the technological knowledge that enables the production of equipment, products and key technologies for defense, as well as the conditions for their constant improvement and introduction of innovations in the sector. The restructuring process of the Brazilian defense industry is intended to ensure that the equipment needs of the Armed Forces are based on technologies that are domestically mastered (Brazil, 2008).

Departing from the assumption that the success of this process requires not only that the Armed Forces have modern equipment and skilled military to operate them, but also that the country accumulates technological and innovation capabilities, this paper aims to contribute to the understanding of the role of infrastructural technologies in supporting innovation in the defense industry in Brazil. Particularly, this work seeks to answer how defense firms perceive the importance of innovation in their economic activities and discuss how infrastructural technologies - metrology, standardization, technical regulation and conformity assessment – can strength their innovation capabilities.

The methodology comprises: (i) literature review on innovation systems and national infrastructural technologies as a basis for discussing the role of metrology, standardization, and conformity assessment in strengthening innovation capacity of DIB's firms; (ii) documentary review covering public policies designed for restructuring the Brazilian defense industry and strengthening technological and innovation capabilities of firms that integrates the BID; (iii) definition of the research scope, the analytical framework, and the primary data source - the Brazilian Survey of Innovation (PINTEC), published by the Statistical Office (IBGE); (iii) data collection and analysis; (iv) discussion of main results and formulation of conclusions and suggestions.

The factors that motivated the development of this work can be grouped into four distinct issues, but complementary: (i) the recognition of the DIB as an important sector of the Brazilian economy, which is facing specific structural changes; (ii) the close relationship between scientific and technological development and the DIB; (iii) the need to strengthen the innovation capabilities of firms that today integrate the DIB, especially in relation to the supply of innovative and strategic defense products; and (vi) the relevance of infrastructural technologies as support to strengthen innovation capabilities of these firms.

Additionally, we identify a lack of empirical studies that reveal the determinants of innovative activities and the degree of innovative effort aimed at the development of defense products, in general, and particularly strategic defense products. In particular, there are few studies about the importance of infrastructural technologies as support to the innovative capabilities of firms, particularly those of defense industry.

We strongly believe that empirical knowledge about innovation efforts by Brazilian DIB firms and the contribution of infrastructural technologies recognized by them will reveal important elements for decisions concerning the Brazilian DIB modernization process (overcoming technological bottlenecks, increasing competitiveness, encouraging exports among others aspects).

Firstly, we present an overview of firm level attributes of Brazilian defense suppliers between 2001 and 2010, pointing out that Brazilian Ministry of Defense (MD), as the sole buyer, is able to shape industry structure. Afterwards, we conceptualize innovation systems and national infrastructural technologies as the theoretical basis for discussing the role of metrology, standardization, and conformity assessment in strengthening innovation capacity of DIB's firms. Subsequently, we detail the methodology adopted for developing the study, as well as the primary data source - the Brazilian Survey of Innovation (PINTEC), published by the Statistical Office (IBGE). Then, the main results are presented and discussed, and finally, in the last section, some final considerations are presented together with and suggestions for the next PINTEC survey and for future research.

## **THEORETICAL BACKGROUND**

The theoretical background encompasses two main themes: (i) innovation systems; and (ii) infrastructural technologies (core and complementary functions). Firstly, we discuss conceptual frameworks of innovation systems, with special attention to Freeman (1987), Lundvall (1992), Edquist and Johnson (1997), and OECD (1997) works. These frameworks proved to be quite useful for analyzing the role of infrastructural technologies

in strengthening innovation capabilities in defense industry in Brazil. Then, we conceptualize infrastructural technologies aligned to the quality infrastructure framework posed by Guasch, Racine, Sánchez and Diop (2007).

## **Innovation systems**

The concept of innovation system has been around for more than 20 years and today it has become widely spread among policy makers as well as researchers all over the world (Freeman, 1987; Lundvall, 1992, 2004; Edquist and Johnson, 1997; and OECD, 1997).

OECD (1997) presented several definitions for a national system of innovation as follows:

“ .. the network of institutions in the public and private sectors whose activities and interactions initiate, import, modify and diffuse new technologies.” (Freeman, 1987).

“ .. the elements and relationships which interact in the production, diffusion and use of new, and economically useful, knowledge ... and are either located within or rooted inside the borders of a nation state.” (Lundvall, 1992).

“... a set of institutions whose interactions determine the innovative performance ... of national firms.” (Nelson, 1993).

“ .. the national institutions, their incentive structures and their competencies, that determine the rate and direction of technological learning (or the volume and composition of change generating activities) in a country.” (Nelson, 1993).

“.. that set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and which provides the framework within which governments form and implement policies to influence the innovation process. As such it is a system of interconnected institutions to create, store and transfer the knowledge, skills and artefacts which define new technologies.” (Metcalfe, 1995).

According to Lundvall, there are several new concepts emphasizing the systemic characteristics of innovation but with focus at other levels of the economy than the nation state. They are: (i) ‘technological systems’ in the beginning of the nineties (Carlsson and Stankiewicz, 1995); (ii) regional systems of innovation (Maskell and Malmberg, 1997); and (iii) sectoral systems of innovation (Breschi and Malerba, 1997; Malerba, 2004); and (iv) triple helix-concept (Etzkowitz and Leydesdorff, 2000). Considering the objectives of the study (focus of this article), we adopted the definition of Lundvall (1992) and agree with the assumptions established by OECD (1997, p. 13) as follows:

“For policy makers, an understanding of the national innovation system can help identify leverage points for enhancing innovative performance and overall competitiveness. It can assist in pinpointing mismatches within the system, both among institutions and in relation to government policies, which can thwart technology development and innovation. Countries differ in the way in which knowledge flows are structured and in the relative importance of different types of institutions, actors and linkages for their respective production systems”.

## **Infrastructural technologies**

Considering that infrastructural technologies is a multidimensional concept, we briefly define them in Table 1. Particularly, recent empirical evidence suggests that standards have positive impacts on technological progress, productivity and trade (Swann and Lambert, 2010; Blind, 2009; Vries, 2006; Krechmer, 2005; Tassey, 2000; Blind and Grupp, 2000). More and more, global consumers demand products and services that meet rigorous standards, to ensure that these products and services suitably integrate supply chains, to satisfy final customer requirements and to comply with technical regulations in importing countries. Moreover, the ability for firms to fully exploit the benefits of standards depends on a supportive MSTC infrastructure (Frota, M.N. et al., 2009; Guasch, Racine, Sánchez and Diop, 2007).

For discussing the role of infrastructural technologies supporting firms in their innovative activities, we adopted the conceptual framework proposed by Guasch, Racine, Sánchez and Diop (2007).

**Table 1: Main concepts of infrastructural technologies: core and complementary functions**

<b>Infrastructural technology</b>	<b>Definition</b>	<b>Classification</b>
Metrology	Metrology is the science of measurement. No testing would be possible unless the characteristics of the product or service in question can be measured in a way, which compares them against physical or chemical reference of known values. Therefore, adequate methods for measuring the properties of products and services are fundamental to the quality assessment process.	Core function
Standardization and technical regulation	Standardization is the process of developing and implementing technical standards. Standardization can help to maximize compatibility, interoperability, safety, repeatability, or quality. It can also facilitate commoditization of formerly custom processes. A technical standard is a document that describes the important features of a product, service or system and, the essential requirements that it must meet. Compliance is voluntary. In turn, a technical regulation is a document issued by an authorized body that details product characteristics, production methods, including administrative provisions, compliance is mandatory.	Core function
Conformity assessment	Conformity assessment procedures are technical activities such as testing, verification, inspection, certification, and accreditation, which confirm that products or processes fulfill the requirements laid down in regulations and standards.	Core function
Intellectual property	Intellectual property includes inventions, literary and artistic works, symbols, names, images and designs used by trade. The property covers two main areas: (i) industrial property (patents, trademarks, industrial designs, geographical indications and plant variety protection); and (ii) copyright (literary and artistic works, computer programs, Internet domains and immaterial culture).	Complementary function
Management technologies	Initially, management technologies focused on quality management (ISO 9000) and environmental management (ISO 14000) management technologies. Today, they also include social responsibility and the principles of sustainability in their broad sense.	Complementary function
Technological information	Technological information can be understood as any information or knowledge of technological, economic, marketing, managerial and social nature, which contributes to the change and improvement of services, processes or products, adding knowledge and intelligence required for decision making.	Complementary function

## METHODOLOGY

This research can be considered descriptive and its development comprised three main phases: (i) conceptual; (ii) applied; and (iii) conclusive. The conceptual phase encompassed literature review covering the research central themes – innovation systems and national infrastructural technologies – as a basis for discussing the role of metrology, standardization, and conformity assessment in strengthening innovation capacity of DIB's firms. Literature survey covered a number of sources for peer-reviewed scientific articles, such as Web of Science;

Scopus; and Science Direct; and also the Internet, using the search engine Google Scholar. In the sequence, a documentary review about current Brazilian public policies designed for restructuring defense industry and strengthening technological and innovation capabilities of firms that integrate the Brazilian BID.

During the applied phase, the study was developed according to the following steps: (i) special tabulations from the Brazilian Innovation Survey (PINTEC) were requested to the Statistical Office (IBGE), according to the definition of the research questions; (ii) receiving and formatting of PINTEC data for later analysis; and (iii) analysis, interpretation and discussion of results. The option of was due mainly to the scope of this research (national coverage) and the possibility of a more dynamic longitudinal analysis than could be offered by alternative methodological strategies. Given the potential for analytical feedback, the use of PINTEC data also presented the advantage of cost and time economy that made possible the case study strategy. It is important to mention that PINTEC was chosen as the primary source of data because of its scope (national and sector coverage) and the possibility of a more dynamic longitudinal analysis than could be offered by alternative methodological strategies. The alternative methodological would necessarily involve fieldwork.

The Brazilian Innovation Survey (PINTEC) – the primary source of data for this study – is based on the measurement framework proposed in the Oslo Manual, which combines theoretical approaches of innovation-based company (Nelson and Winter, 1982; Rosenberg 1982; Dosi, 1988) with those that take innovation as a system (Freeman, 1987; Lundvall, 1992; Edquist and Johnson, 1997; and OECD, 1997). Regarding the request of special data tabulations from PINTEC 2011, we faced some difficulties. There is some debate over the boundaries of the Brazilian Defense Industrial Base (DIB), since there is no specific National Classification of Economic Activities (CNAE) to group suppliers of defense products in one specific sector. In this sense, we adopt the Directory of the Brazilian Association of Defense Materials and Security Industry (ABIMDE) as source for identifying the main DIB's firms in Brazil. We found 207 registered members (DIB's firms). From this initial list, we sought additional information on institutional websites of these firms and their data in the National Register of Legal Entities (CNPJ), aiming at applying for special tabulations of the IBGE PINTEC 2011. From 207 ABIMDE associated companies, we selected 128, according to their CNAE classes, which are associated to CNAE classes covered by Brazilian Innovation Survey (PINTEC).

From a total of 128 DIB firms with economic activities contemplated by PINTEC 2011, 95 are manufacturing from manufacturing industry, and 33 from selected services (CNAE 62, 63.1, 71 and 72). The statistical table plan related to special data tabulations requested to IBGE focused on six variables of PINTEC 2011, as follows: (i) innovative activities; (ii) innovation impacts; (iii) sources of innovation; (iv) cooperative relationships for innovation; (v) problems and obstacles for innovation; and (vi) organizational and marketing innovations. According to PINTEC structure and conceptualization, each variable was described and deployed into their respective categories, totaling 62 categories. Detailed description of each category is available in Lustosa (2011) and also in a document titled 'IBGE guidelines for PINTEC 2011' (2012, in Portuguese).

After receiving and formatting data received from IBGE, we analyzed and discussed results, as presented in the following section. Finally, in conclusive phase, general conclusions were drawn in relation to each objective listed in the introductory section and suggestions were addressed to future surveys by IBGE and research papers conceived as future developments based on results and conclusions of this study.

## **MAIN RESULTS**

The main results can be summarized as follows: (i) identification of PINTEC items directly associated with infrastructural technologies; (ii) identification and analysis of DIB firms' perceptions about innovative activities; innovation impacts; sources of innovation; cooperation relationships for innovation; problems and obstacles for innovation; and organizational and marketing innovations; and (iii) discussion on DIB firm's perceptions from the perspective of the role of infrastructural technologies in supporting their innovation capabilities.

### **PINTEC items directly associated with infrastructural technologies**

We analyzed the relationships between PINTEC categories selected for this research and infrastructural technologies (metrology; standardization and technical regulation; conformity assessment; intellectual property and others complementary functions). This analysis sought to answer the following question: "Among the 62 categories associated to the six main variables of PINTEC 2011, which are those that are closely linked to one or more infrastructural technologies?". As a result, we identified 34 categories that had strong ties with one or more infrastructural technologies. The remaining 28 showed moderate or weak links.

Table 2 presents PINTEC 2011 categories that have strong ties with the infrastructural technologies, as a result from a content analysis of definitions and concepts presented in Table 1 and those posed in PINTEC 2011 Guide (IBGE, 2011).

**Table 2: PINTEC items strongly associated with infrastructural technologies**

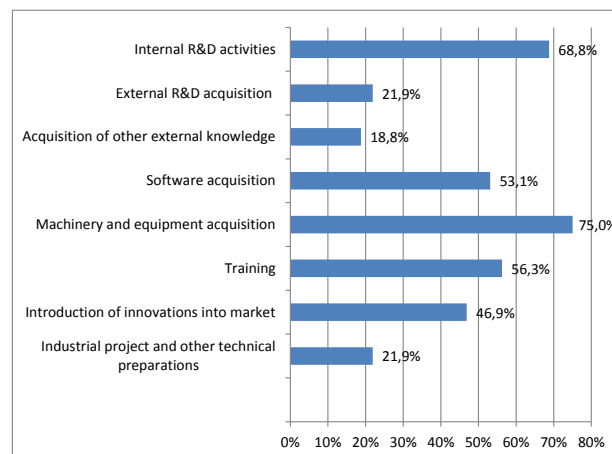
<b>PINTEC Variable</b>	<b>PINTEC Category</b>	<b>Infrastructural technologies</b>
Innovative activities (8 categories)	Internal R&D activities.	Metrology; standardization and technical regulation; intellectual property; and technological information.
	External R&D acquisition.	Idem.
	Machinery and equipment acquisition.	Idem.
	Introduction of innovations into market.	Metrology; standardization and technical regulation; conformity assessment; and intellectual property.
	Industrial project and other technical preparations.	Metrology; standardization and technical regulation; conformity assessment; and management technologies.
Innovation impacts (15 categories)	Compliance with regulation and standards.	Metrology; standardization and technical regulation; conformity assessment; technological information.
	Control over environmental, health and safety issues.	Standardization and technical regulation; conformity assessment; management technologies; technological information.
	Reduction of environmental impacts.	Idem.
	Entrance in new markets.	Standardization and technical regulation; conformity assessment; intellectual property; and technological information.
	Maintenance of market share.	Idem.
	Broadening the range of products.	Metrology; standardization and technical regulation; conformity assessment; intellectual property; and technological information.
	Improving products quality.	Standardization and technical regulation; conformity assessment; intellectual property; and management technologies.
Sources of information (13 categories)	R&D department.	Metrology; standardization and technical regulation; conformity assessment, and technological information.
	Customers and consumers.	Standardization and technical regulation; conformity assessment, and technological information.
	Competitors.	Idem.
	Suppliers.	Standardization and technical regulation; conformity assessment, and technological information.
	Universities.	Metrology; standardization and technical regulation; conformity assessment, and technological information.
	Accredited organisms and laboratories for tests and certification.	Standardization and technical regulation; conformity assessment; and technological information.
	Conferences, technical meetings and specialized publications.	Technological information.



	Fairs and exhibitions.	Idem.
	Information networks and databases.	Idem.
Cooperation relationships for innovation (8 categories)	Accredited organisms and laboratories for tests and certification.	Standardization and technical regulation; conformity assessment and technological information.
	Customers and consumers.	Standardization and technical regulation; conformity assessment, and technological information.
	Suppliers.	Idem.
	Universities and R&D centers.	Metrology; standardization and technical regulation; conformity assessment, and technological information.
Problems and obstacles for innovation (12 categories)	Scarcity of appropriate external technical services.	Idem.
	Weak consumer response to new products.	Standardization and technical regulation; conformity assessment, and technological information.
	Difficulty in demonstrating compliance with standards and regulations.	Metrology; standardization and technical regulation; conformity assessment, and technological information.
	Scarce possibilities for cooperation with other enterprises/institutions.	Standardization and technical regulation; intellectual property; and technological information
	Lack of information about technology.	Idem.
	High economic risks.	Idem.
	High innovation costs.	Idem.
Organizational and marketing innovation (6 categories)	Implementation of environmental management techniques.	Standardization and technical regulation; intellectual property; and technological information
	Implementation of management techniques.	Idem.

## DIB firms' perceptions about their innovative capabilities

Among the DIB firms that have implemented product or process innovations, 68,8% attributed high and medium importance for 'internal R&D'; 75,0% for 'machinery and equipment acquisition'; and 46,9% for 'introduction of innovations into market' (Figure 1).

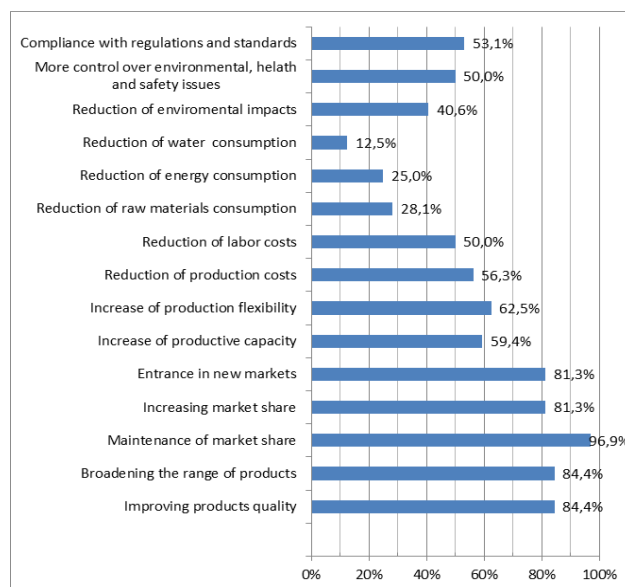


**Figure 1: Importance of innovative activities as perceived by DIB firms which implemented product or process innovations**

These results are convergent with the previous ones concerning links between innovative activities and infrastructural technologies. Internal R&D efforts are strongly supported by a national MSTC infrastructure, especially by metrology, regulation and standardization activities (core functions) and intellectual property and information technology (complementary functions). The analysis of other innovative activities showed that even those in which the connection with infrastructural technologies is not so strong, the potential contribution exists and can help those firms to strength their innovative capabilities. Additionally, the innovative activities (for example, ‘external R&D’) that were not considered very important according to DIB firms’ perceptions could theoretically increase its relevance if they fully exploit the benefits of a supportive MSTC infrastructure. In another words, the promotion of efficient technological services reflecting the core functions and complementary functions of MSTC infrastructure could improve the perception of DIB firms in relation to all innovative activities included in PINTEC 2011 survey.

Figure 2 shows the importance of innovation impacts as perceived by DIB firms which implemented product or process innovations. In relation to the importance of innovation impacts as perceived by DIB firms which implemented product or process innovations, we found that 96,9% attributed high and medium importance for ‘maintenance of market share’; followed by ‘broadening the range of products’ and ‘improving products quality’, both with 84,4% of favorable responses. ‘Entrance in new markets’ and ‘increasing market share’ were also perceived as important impacts (81,3 % of favorable responses).

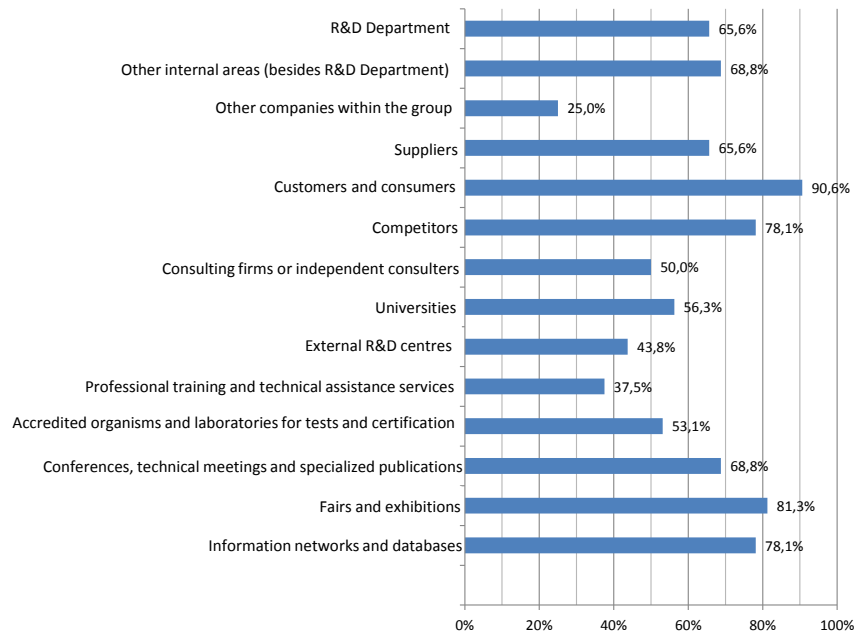
In this case, infrastructural technologies have strong influence in innovation activities with final impacts above mentioned. But, concerning the remaining impacts, such as ‘compliance with regulation and standards’; ‘control over environmental, health and safety issues’, and ‘reduction of environmental impacts’ (53,1%, 50,0% and 40,6% of favorable responses, respectively), we can estimate that DIB firms will gradually assuming postures and sustainable practices in the broad sense (economic, environmental and social). The most important impacts, as perceived by them, are clearly associated with economic sustainability. We assume that in next PINTEC, the results will be more favorable to the latter impacts, with the support of infrastructure technologies, such as standards for life cycle analysis of innovative products, emissions inventory according to normative references, sustainability reporting according to Global Reporting Initiative Guidelines, to name a few examples.



**Figure 2: Importance of innovation impacts as perceived by DIB firms which implemented product or process innovations**

Figure 3 shows the importance of different sources of information considered important for innovative activities performed by DIB firms which implemented product and process innovations. In this case, we found that 90,6% attributed high and medium importance for ‘customers and consumers’; followed by ‘fairs and

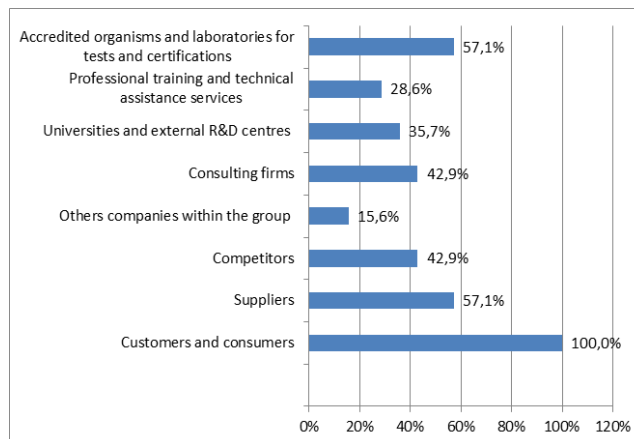
exhibitions’, with 81,3%, ‘information networks and databases’, and ‘competitors’, both with 78,1% of favorable responses.



**Figure 3: Importance of sources of innovation as perceived by DIB firms which implemented product or process innovations**

In reference to the results showed in Figure 3, we found that critical sources of information, such as R&D department, other internal areas, and accredited organisms for tests and certifications, were perceived as important by 65,6%, 68,8% and 53,1% of respondents, respectively. Here, again, the sources that were not considered very important according to DIB firms’ perceptions could theoretically be increased if these firms fully exploited the benefits of a supportive MSTC infrastructure.

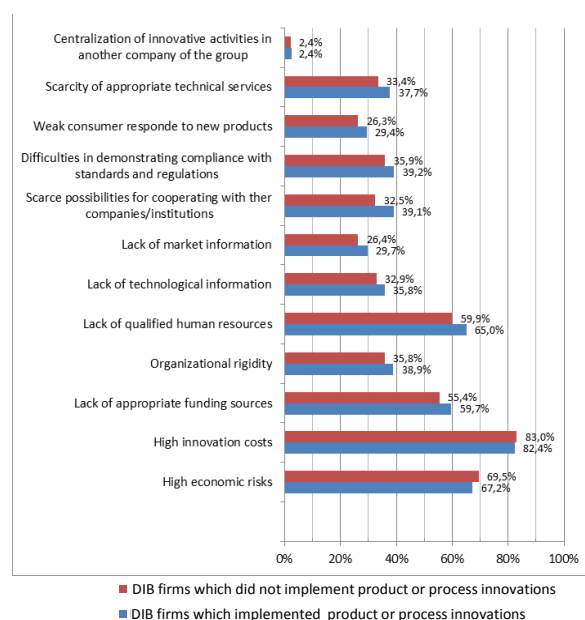
Figure 4 refers to the importance of cooperation relationships for innovation as perceived by DIB firms which implemented product or process innovations.



**Figure 4: Importance of cooperation relationships for innovation as perceived by DIB firms which implemented product or process innovations**

The results (Figure 4) show that cooperation with customers and consumers is of paramount importance for DIB firms, being the government their major customer. Besides, this type of relationship can be supported by infrastructural technologies such as standardization and technical regulation; conformity assessment, and technological information (Table 1). The analysis showed that all categories of cooperation exhibited moderate or strong ties with the functions of the TIB. Thus, in general, all relations of cooperation could be narrowed by adoption of standards, use of technological information, voluntary conformity assessment practices, just to name a few examples.

Figure 5 focus on problems and obstacles for innovation as perceived by all DIB firms – those that implemented product or process innovations and those that did not.

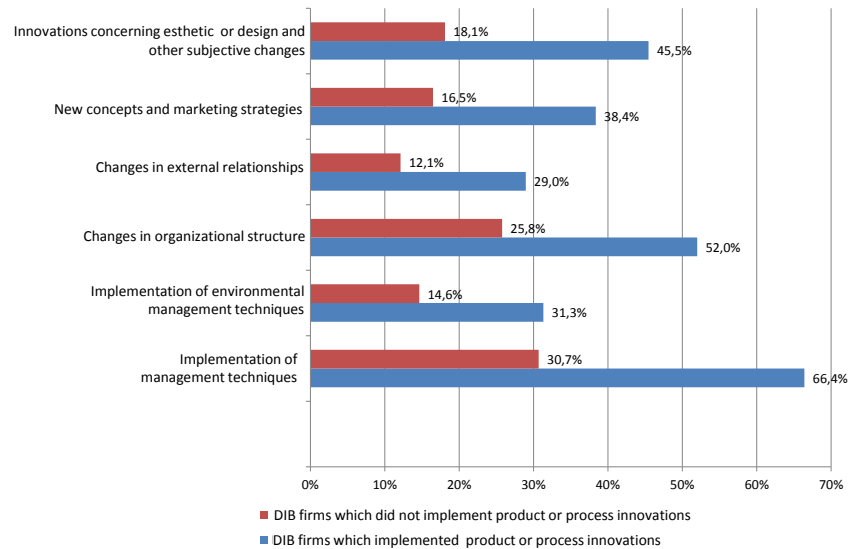


**Figure 5: Problems and obstacles for innovation as perceived by all DIB firms**

The problems and obstacles featured by DIB firms allowed us to analyze how infrastructural technologies may influence (positively or negatively) companies facing such problems. Excluding economic problems ('high economic risks' and 'high innovation costs'), DIB firms pointed out the 'lack of qualified human resources' as a biggest obstacle. This problem can be mitigated by encouraging personnel certification among DIB firms (obtained through specialized technical training). This analysis also showed that infrastructural technologies may have a negative influence, posed as 'difficulties in demonstrating compliance with standards, guidelines and regulations. We also notice that there was not a significant difference between the patterns of responses of those firms that implemented product or process innovations compared to those that did not.

Finally, we present in Figure 6 the results concerning the opinion of all DIB firms about their efforts towards market and organizational innovations.

The results in Figure 6 show that DIB firms that implemented product or process innovations also implemented marketing and organizational innovations. In turn, those firms that have not implemented product innovations or process showed lower levels of implementation of marketing and organizational innovations. From the analysis of the links between infrastructure technologies and innovations category here addressed (Table 1), we point out that 'management techniques', in general, and the 'environmental management techniques', in particular, can be quite reinforced as important issues in this category, if DIB firms continue to adopt standards and innovative management tools with the support of an effective MSTC infrastructure.



**Figure 6: Market and organizational innovations by DIB firms which implemented product or process innovations and did not**

## CONCLUSIONS

This article summarized the main results of an academic research, focusing on the role of infrastructural technologies in supporting innovation within the defense industry in Brazil. Particularly, from the PINTEC 2011, we could show how defense firms perceive the importance of innovation in their economic activities and discuss how infrastructural technologies - metrology, standardization, technical regulation and conformity assessment – can strength their innovation capabilities.

Essentially, the conclusion of this research is that infrastructural technologies are present in all innovative activities in the defense industrial base (DIB). Metrology, standardization, technical regulation and conformity assessment (MSTC) activities are inherent elements of a national scientific-technological system capable of promoting innovation, technology transfer, economic competitiveness, and sustainability of firms, in a broader perspective. Together with accreditation (which ensures that conformity assessment activities have been performed by competent bodies in accordance with appropriate standards and best practices), standardization and metrology bodies form a country's national quality infrastructure for support and enhance DIB firms' innovative capabilities.

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# **SUSTAINABLE INNOVATION AND THE DIMENSIONS OF COMPLEXITY**

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## **ABSTRACT**

*This article discusses the basis for innovative and sustainable strategies appropriate for contemporary business organizations challenged by the high degrees of complexity and competitiveness of globalization. Elements of a framework for understanding the process of innovation as a complex system are presented, with a view at supporting the development of more qualified and sustainable innovations. The desired framework, that should incorporate the dynamics of innovation planning and learning processes, reflects the need for compatibility of organizational and technological processes. This is a conceptual work, developed based on direct observation and bibliographical research, which emphasizes the idea that the perception of innovation as a complex system can improve this process.*

**Keywords:** Socio-ecological perspective; complex sociotechnical systems; innovatory planning; adaptive planning complexity theory

## **INTRODUCTION**

The objective of this work is to identify key elements for the formulation of a conceptual framework for understanding the innovation process as a complex system, characterizing the main constructs and variables that affect this phenomenon. It is believed that this perception can contribute to the design of more effective innovative processes, leading to more qualified and sustainable innovations.

The envisioned framework should serve to support the formulation of innovation policies appropriate for establishing a process of sustainable development, based upon the capacity of creating new goods and services. According to Almeida and Melo (2012, p.1):

The paradigm of sustainable development presents several challenges to companies that conduct cutting edge research and endeavor to create new, distinctive products and services. It also challenges the markets and society for which new products and services are destined, shaped by cultural value systems and political frameworks.

The discussion of innovative and sustainable strategies for business organizations in this globalized world, imbued with high degrees of complexity and competitiveness, is here grounded upon the identification of a set of concepts that delineate the dimensions of complexity, considering the high level of uncertainty and ambiguity and the dynamic interfaces that characterize complex processes. The scope of the dimensions of the innovation process are here expanded by adding elements relating to the dynamics of innovation planning and of the learning processes.

This is a conceptual work, developed on the basis of 'observing participation' and bibliographical research, regarding the themes of adaptability and sustainability, complex systems, innovation, organizational ecology and the sociotechnical approach. In terms of the 'observing participation' approach, the role and



behaviour of an ‘observer participant’, as opposed to that of a ‘participant observer’, is one in which the substantive activity is the intervention carried out by the researcher, and the observation is rather a by-product of this participation (Melo, 1977).

## MANAGING THE INNOVATION PROCESS

Considering that future technologies and technological innovations can generate more sustainable businesses, offering new options for creating value, Almeida and Melo (2012) highlight the challenge of discerning how to integrate economic, social and environmental sustainability – equally complex – in the technological strategies of companies that operate in increasingly more complex contexts (Almeida, 2006).

To meet this challenge, the same authors present a conceptual model for sustainability-oriented innovation management, based on the observation that, although new technologies may offer revolutionary solutions, turning obsolete the bases of many of today’s industries, in general changes in established sociotechnical systems are more incremental than radical, thus being inadequate to deal with the prevailing sustainability demands (Almeida & Melo, 2012). A fundamental guideline for the formulation of this model was the acknowledgement that:

In a complementary way, the socio-technical principles (Cherns, 1976), the organizational learning approach (Argyris and Schön, 1978, 1996; Fiol and Lyles, 1985; Kerkhof and Wieczorek, 2005) and the transition management literature (Geels, 2004; 2005; Geels and Schot, 2007; Loorbach and Rotmans, 2006) stress the view that sustainability-oriented innovation management will have to go along with a process of change of social and organizational contexts (Almeida and Melo, 2012, p.6)

That model was developed based on an action research methodology, thus adopting an ‘observer participant’ posture. According to the model, a few aspects are mandatory to support sustainability-oriented innovation: to develop ways of adapting and making compatible organizational processes and technologies, as stressed by the socio-technical approach; to embrace adaptive planning approaches, considering planning as a learning process; and to emphasize the essential role of learning in the process of induced change towards sustainability (Almeida & Melo, 2012).

## THE DIMENSIONS OF COMPLEXITY

In a central article about complexity and organization theory, Anderson acknowledges that “organization theory has not yet caught up with the sophisticated tools that have emerged for analyzing the behavior of complex adaptive systems” (1999, p. 229). Considering the nonlinear behavior exhibited by complex organizations, he concludes that the adoption of complex adaptive systems models to strategic management leads to building systems that can rapidly evolve effective adaptive solutions. He affirms:

Because complexity theory has developed along a very interdisciplinary path, it may be that in the end, organization theory contributes as much as it borrows to the development of insight into the behavior of complex systems. Many modern organizations are complex adaptive systems par excellence, and we who study them should eventually lead instead of follow efforts to understand the fundamental nature of non-linear, self-organized structures (p. 230).

Anderson (1999) develops his reasoning considering complex systems as formed by a large number of parts, which display many and varied interactions, as defined by Simon (1996), and “a complex organization as a set of interdependent parts, which together make up a whole that is interdependent with some larger environment”, as described by Thompson (1967, p. 6). Complex thinking tries to understand the relationship of organizations and environment from a systemic perspective, aiming at identifying the main factors that configure these connections.

Complexity can be characterized by four dimensions: structural, organizational, and technological dynamics (Van Der Ven, 2010, *apud* Nunes, 2013). Complex systems, according to Hays (2010), present a high degree of uncertainty, ambiguity, dynamic interfaces and of significant political influence. The different

variables involved in the innovation process interact in a complex and dynamic way, which hinders the understanding of their causal relations. This interdependence contributes to magnify the uncertainties inherent in this process, inhibiting the identification and prioritization of its key elements.

Different dimensions of complexity of the innovation phenomenon can be illustrated in themes as the hypercube of innovation, the sociotechnical vision, organizational networks for innovation and organizational ecology.

## **The Hypercube of Innovation**

The concept of hypercube of innovation, proposed by Afuah and Bahram (1995), starting from the classification of innovation as radical, incremental, modular, architectural, or niche (Henderson & Clark, 1990), shows that an innovation of one type for the innovative organization, may be of diverse categories for customers, suppliers and providers of critical complementary innovation. Thus, innovation strategies that neglect these different faces of innovation and focus only on innovation at the level of the manufacturer can have disastrous effects. For the authors, this happens mostly for innovations whose success depends on further innovations that rely on learning for its use and which have positive network externalities at the customer level.

## **The Sociotechnical Vision**

From a sociotechnical perspective, organizations must optimize jointly their technical and social subsystems. Hypertrophy of one of these components, which can occur when you incorporate innovations that behold only one of these subsystems, neglecting the other, often results in unsuccessful innovation. Successful joint optimization, however, is a complex process, which must be understood in the light of the theory of complexity.

## **Adaptive Planning**

The adaptive planning approach take a stand at the normative level (Trist, 1976), discussing the values involved and the appreciation of the consequences of the actions taken. It constitutes a continuous learning process, characterized by flexibility and active adaptation, and by the continuous appraisal of the actions implemented, leading to the constant redefinition of objectives and goals. It requires the participation and effective involvement of members of the organization, demanding coordination of actions and integration of different organizational levels, from a holistic standpoint.

This type of planning process aims at the radical transformation of the system, intending to make it more and more compatible with its organizational domain. Developed upon a socio-technical basis, it treats the social and the technical subsystems as mutually complementary, aiming at their joint optimization, thus rejecting any form of technological determinism (Trist, 1965). The effective involvement of the multiple actors that play an active role in the innovation phenomenon is a *condition sine qua non* to assure the identification and the implementation of ways to deal with the complex factors that might affect the sustainability of the innovations designed (Melo, 2013).

## **Innovatory Planning**

An example of adaptive planning is Innovatory Planning, which defines strategies, processes, methods, attitudes and postures appropriate for an organization facing technological innovation and its dual, social innovation (Melo, 2003). Based upon Articulated Incrementalism, an adaptive planning methodology (Melo, 1977), it favors the identification and implementation of technical, social and managerial changes that enable an organization to assimilate the impact of new technological processes and to meet the challenges of turbulent environments, integrating elements of socio-technical approach and adaptive planning. Providing a basis for analysis of innovative technological and social strategies, it privileges innovation which respects social, economic and environmental sustainability requirements. To be effective, it demands a new focus, considering the inter-organizational dominion, for no single organization can control the complexity of interrelationships and uncertainty that characterizes innovation.]

## **Organizational networks for innovation**

The contribution to the improvement of the innovation process, from the formation of networks, is established and widely recorded globally. Participation in collaborative arrangements has long been considered of great importance to generate an effective process of innovation, and in particular, to provide a faster way to develop technology excellence. (Gonzalez Alvarez, 1997). However, it is important to avoid the pitfall of transforming the network, from a mere instrument for sharing knowledge and other resources, useful to extend the capabilities of each of its members and increase collective efficiency, into an end in itself, falling in the trap, denounced by Melo (2009), of the network *gratia* network, thus missing its main driving force. .

## **The Socio-Ecological Perspective**

Trist (1981) expanded the customary analytical levels of sociotechnical analysis - comprising the work unit, the organization as a whole and the macro-system - to cover the organizational ecosystem formed by organizations sharing a common action space, thus shifting the focus of analysis to a network of organizations, which, in principle, would more effectively assimilate technological and social innovations. This new focus characterizes the socio-ecological perspective.

The rationale behind the inter-organizational perspective, that aims at understanding the organization in its action domain, is based upon the principles of organizational ecology (Trist, 1976), which advocates that the function of regulation replaces those of production, as basic function to the harmonic functioning of a system composed of actors of different natures, often displaying conflicting goals. Therefore, this perspective also requires an analysis that incorporates the vision of complexity, for a clearer perception of the phenomenon involved in the organizational processes including innovation.

A significant part of the effort of innovation occurs by means of organizational networks, effective to compensate the internal insufficiency of knowledge and enhance organizational capacities and competencies (Melo and Agostinho, 2003). There are a growing number of virtual networks, resulting from the geographical dispersion of its members, which is one of the defining elements of the level of complexity of the current innovation effort.

## **THE INNOVATION PROCESS AS A COMPLEX SYSTEM**

The framework for understanding the innovation process as a complex system, here proposed, is delineated by identifying a set of fundamental concepts, essentially related to the construct of self-organized systems, a basic building block of the complexity theory.

### **Adaptation, auto regulation and self-organization**

At the epicenter of complexity theory are the ideas of adaptation and self-organized systems. One of the bedrock principles of complex theory, identified by Pascale (1999) as relevant to the strategic work, is described in these terms:

Complex adaptive systems exhibit the capacity of self-organization and emergent complexity. Self-organization arises from intelligence in the remote clusters (or "nodes") within a network. Emergent complexity is generated by the propensity of simple structures to generate novel patterns, infinite variety, and often, a sum that is greater than the parts (p. 85).

Further elaborating this matter, the author emphasizes:

For an entity to qualify as a complex adaptive system, it must meet four tests. First, it must be comprised of many agents acting in parallel. It is not hierarchically controlled. Second, it continuously shuffles these building blocks and generates multiple levels of organization and structure. Third, it is

subject to the second law of thermodynamics, exhibiting entropy and winding down over time unless replenished with energy. In this sense, complex adaptive systems are vulnerable to death. Fourth, a distinguishing characteristic, all complex adaptive systems exhibit a capacity for pattern recognition and employ this to anticipate the future and learn to recognize the anticipation of seasonal change (p.84).

Anderson (1999), reinforcing the central role played by adaptation in the theories of complexity, characterizes the nature of the adaptive process:

In environments far from equilibrium, where cascades of change are constantly playing out and overlapping with one another, adaptation must be evolved, not planned (Anderson, p. 228).

The evolution of adaptation performed by self-organizing systems can only occur following the laws of auto regulative processes. Therefore, regulation, as the basic function for the joint action of multiple actors systems, as preconized by the socio-ecological perspective, constitutes a key factor in dealing with complexity.

## **Autonomy versus Interdependency**

Although, at first sight, these terms might convey some opposition, a closer examination will show that they might be complementary. Autonomy, which means self-government, is often understood as independence, and this constitutes a misleading notion. From the complexity theory standpoint, a basic principle is that of auto-regulation and it is imperative that organizations in a group have the capacity of organizing themselves in a democratic way, as preconized by the socio-ecological view, according to what has been discussed here. Notwithstanding this, an autonomous systems depends on other systems to receive the resources – including cooperation – necessary to perform its functions.

## **Exploitation and Exploration**

A central concern the studies of adaptive processes, in the view of March is “the relation between the exploration of new possibilities and the exploitation of old certainties (Sehumpeter 1934; Holland1975; Kuran, 1988)”. He describes these concepts in the following way:

Exploration includes things captured by terms such as search, variation, risk taking, experimentation, play, flexibility, discovery, innovation. Exploitation includes such things as refinement, choice, production, efficiency, selection, implementation, execution. Adaptive systems that engage in exploration to the exclusion of exploitation are likely to find that they suffer the costs of experimentation without gaining many of its benefits. They exhibit too many undeveloped new ideas and too little distinctive competence. Conversely, systems that engage in exploitation to the exclusion of exploration are likely to find themselves trapped in suboptimal stable equilibria. As a result, maintaining an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity.(March, p.71)

## **Single loop learning and double loop learning**

Argyris (1977) identified two types of learning, based on the distinction between 'single loop' and 'double loop' learning, initially formulated by Ashby (1952). Observing that managers can detect and correct errors, by uncovering their own hidden theories of action, he states:

“Organizational Learning is a process of detecting and correcting error. Error is, for our purposes, any feature of knowledge or knowing that inhibits learning. When the process enables the organization to carry on its present policies or achieve its objectives, the process maybe called single loop learning. There is a second and more comprehensive inquiry; that might be called double loop learning that occurs when underlying organization policies and objectives are questioned. (Argyris, 1977, p.116)

Thus, a deeper level of organizational learning requires the questioning of the normative values or assumptions of the organization, generating a change in these governing variables. This configures an indispensable feature of an effective and sustainable innovation process.

## CONCLUSION

Here, an attempt was made to identify and integrate key constructs that could contribute to the formulation of a conceptual model that reflects the logic of the process of innovation, suggesting that the combination of these concepts and their incorporation in the thinking about innovation could be relevant for improving the innovation process.

The discussion highlighted the effects of the dimensions of complexity in the innovation process and stressed the need for adequacy and compatibility of organizational and technological processes. The guiding idea was to explore ways to bring the constructs identified to improve innovation, increasing its productivity and tuning it with the needs of society and people, whose quality of life it is supposed to enhance in a sustainable way.

The ultimate aim, to be achieved with the continuation of this work, is to elaborate a theoretical framework that would enhance the formulation of guidelines for the proposition of evaluation criteria for qualified innovation, helping to avoid the trap of transforming innovation into an imperative, as reflected in the motto 'innovate or perish', with the threat of making it a predominant value, that would prevail against more sustainable social values.

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# ONLINE MEDIATION IN CROSS-BORDERS CIVIL AND COMMERCIAL MATTERS

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## ABSTRACT

*The internet has brought a whole new world of possibilities to international trade, allowing the acquisition of goods and services in different countries. Cross-border transactions entail new types of conflicts, and it is crucial to ensure that there are effective tools which will allow resolving disputes in a fast, cheap and fair way, specially through out-of-court instruments, such as mediation. In the present paper we intend to study the advantages and difficulties of the implementation of on-line mediation, especially in cross-border civil and commercial matters. Our objective is to analyze the procedural aspects of electronic mediation to establish the legal basis for cross-border electronic mediation, from legal, organic and structural perspective in order to serve to complement not only the future EU regulation about Alternative Dispute Resolution Online (ODR), but also the international regulations on this matters.<sup>1</sup>.*

**Keywords:** Cross-borders conflicts; ODR; online mediation; e-mediator

## INTRODUCTION

The global access to the Internet is an undeniable fact of the current digital age. In nearly every country around the world it is possible to contract almost all kind of products and services desired using the internet. So, if it is possible to buy and sell products or contract services through on-line ways, we should ask why it cannot be also possible to solve the conflicts emerged from internet transactions by electronic mechanisms?

Nowadays, cross border legal disputes are growing and trends suggest that their growth will continue in the coming years. There is no doubt that every day, and more and more, is bought and sold outside the borders of each country and people is getting services from companies in other countries. In conclusion: businesses are global, and therefore legal solutions to them must also be global. Cross-border disputes are legally complex and costly, that's why no jurisdictional options seems convenient, simple and affordable for cross-border conflict legal disputes.

In the area of Private Law is consolidating the implementation of so-called alternative dispute resolution (ADR) as out-of-court methods of conflict resolution. Gradually, we are witnessing an increasing application of new technology and communication (ICT) systems on the justice field, particularly in the context of ADR, collectively referred as ODR (Online Dispute Resolution). Online dispute resolution (ODR) is a branch of dispute resolution which uses technology to facilitate the resolution of disputes between parties. In fact, the

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combination of the efficiency of conventional systems of ADR with the advantages offered by the ICT systems, create new possibilities to solve efficiently conflicts, especially when emerged from e-commerce. One of the ODR mechanisms that obtain more attention nowadays is electronic mediation or on-line mediation. Citizens find here one cheaper and faster new conflict resolution system. On the other hand, simplification of claims in civil and commercial matters through an electronic out-of-courts procedure it is particular benefit to companies and SMEs. In Europe, for example, the Mediation Directive 2008/52/CE does not develop the procedural aspects of electronic mediation. Recently, European Union has adopted two key legislative measures regarding ADR for consumer disputes: the ADR Directive (Directive 2013/11/EU) and the ODR Regulation (Regulation (EU) 524/2013). However, these two legal documents are confined to the consumption area, leaving out a whole set of domestic and cross-border conflicts.

In this context it is important to analyze the advantages and difficulties of the implementation of on-line mediation, especially in cross-border civil and commercial matters. The objective of this paper is to study the procedural aspects of electronic mediation to establish the legal basis for cross-border electronic mediation, from legal, organic and structural perspective in order to serve to complement not only the future EU regulation about Alternative Dispute Resolution Online (ODR), but also the international regulations on this matter. It is also very important to analyze and study the consequences that on-line mediation would have on mediators, with a new vision of it: e-mediator or mediator 2.0. It is essential to research about their legal statute: rights, responsibilities, skills, qualities, training, etc., in order to develop a proposal of “European Code of Conduct for electronic mediators”, which can serve as a reference for Governments and Administration of Justice, as well as mediators themselves.

## **ADVANTAGES AND DIFFICULTIES OF THE IMPLEMENTATION OF ON-LINE MEDIATION**

The aim of this paper is to facilitate some ideas about the advantages and disadvantages of cross-border civil and commercial transactional disputes handled through electronic (on-line) mediation. We must be ready to see more and new scenarios to manage our legal conflicts in cross-border civil and commercial matters. These kinds of conflicts are hard to predict, and lawyers regularly face difficulties as they occur in unknown jurisdiction, manage in different legal systems, cultures and languages, long distances, and generally they are forced to hire a more skilled local lawyer which helps them to solve the dispute according to the application of national laws.

Hogan Lovells's study (2014) found that: It must be said that cross-border disputes are not always a bad thing. Yes, handled badly, they can be difficult and expensive to navigate. Yet, skillfully managed, they can provide extraordinary opportunities to protect or promote a company's market position. In a globalized economy, cross-border disputes are becoming ever more complicated, taking companies into disputes and courts in countries they could never have anticipated. Furthermore, regulatory agencies are subjecting corporate transactions to closer scrutiny and mounting coordinated enforcement actions across multiple jurisdictions

The challenge may be to drive a significant number of cross-border conflicts in civil and commercial businesses out-of-courts, and furthermore, the application of new technology and communication (ICT) systems as a highly desirable possibility to getting faster, safer, cheaper and time costless options to solve efficiently conflicts emerged from cross-border e-commerce or businesses. Some risks could be reduced to solving cross-border legal disputes, if the ODR are chosen. ODR can augment traditional ADR by applying online technologies and methodology to dispute resolution processes.

We think it's better to present first one of the main disadvantages of resolving cross-border conflicts, and then go forward to the advantages and profits of ODR's implementation as a suitable way to resolve certain legal cases involving more than one jurisdiction. When cross-border dispute arises it's very critical to handle the law and the judicial system of a country that is not yours. The lack of familiarity with rules, judges, courts and procedural laws of a foreign country, and the differences between legal systems greatly complicate a correct and effective conflict resolution approach, when relying on these external factors, so one of the issues that may be advantageous is to choose a path of conflict resolution in which the disputing lawyer hands the keys to solve the dispute, that is, a way of resolving the conflict in which is possible to decide how it is solved. This is the

appropriate situation to perceive the great advantages of mediation as ADR, as a legal mechanism in which the parties are setting how to resolve your dispute and also is not required strict enforcement of law. So, do not forget, the complexity of coordinating lawyers across different countries, legal systems and jurisdictions and addressing differences in culture, places and costs of disputing that in mediation to cross-border disputes were reported as minor circumstances. Also, in cross-border mediation in civil and commercial matters there is an absence of home-court advantage to the part who sues in the own jurisdiction.

According to the survey conducted by the European Commission in 2013, entitled "Justice in the EU", the main issues relating to civil and commercial courts of the Member States of the EU seem to be:

- a) time duration (65% of respondents considered poor)
- b) economic cost of the legal proceedings (48% of respondents considered very poor)

Almost nine out of ten people (89%) would prefer to settle a dispute out of court if there were alternatives. Flash Eurobarometer (2013) shows that: Less than a tenth of respondents (8%) say they would go to court anyway if there were alternatives. Roughly nine out of ten people (89%) would seek an agreement out of court. Over four out of ten people (43%) say that they would find an agreement with the other party directly, while 46% say that they would find an agreement with the other party with the help of a non-judicial body that has a mediation role (p. 10).

## Online mediation advantages

It is clear that we could establish some advantages of cross-border electronic (online) mediation over the courts in private law disputes:

1.- ODR minimizes jurisdictional issues. It can provide a neutral forum when selecting a meeting place proves difficult.

2.- Increased temporal and spatial availability (conflict resolution is not limited to convene the parties in particular and concrete place and time). Mobility, flexibility and easy exchange of information, online mediation promotes interaction at distance without geographic limitations. For parties, online mediation "is convenient. Parties choose when to participate, at least when employing asynchronous communication; travel time and fuss is eliminated in any event" (Ebner, 2012, p. 376).

3.- Lower cost (even compared to other forms of ADR). Mediation is cheaper and faster than legal proceedings in courts, and creates a document and information repository always available for parties and mediators.

4.- Mediation helps both parties to reach a mutually acceptable agreement in an amicably scenario. After mediation, it is likely that the relationship between the parties can be maintained in the future due to the limited or little damage caused to their previous relationship.

5.- According to EU data, ODR in the EU, mediation save consumers around 22,500 million euros per year (0.2 of EU GDP).

6.- Removes physical disabilities.

7.- In e-commerce disputes, ODR may be the only feasible resolution option available to the parties.

## Online mediation disadvantages

Also, on the other hand, we can argue that mediation, mainly in online mediation, does seem to offer a wealth of disadvantages. First major drawback is called as "the digital divide", referring to a whole between the communities or persons that have access to internet and can make use of the new services offered by the World Wide Web and those who do not and are excluded from this services and possibilities. Also this concept can refer to all the new technologies of information and communication technologies (ICTs), such as personal computer, telephony mobile, broadband and other devices. Finally, this term also refers to the differences between groups according to their ability to use ICT effectively, due to the different levels of literacy deficiencies and problems in the access to technology. Online mediation is only desirable and possible if mediator and parties have access to internet and computers and if they are competent and comfortable with technology of the type of online mediation proposed to employ. The risk is that sometimes it is hard to feel if one of the parties is discomfort with an online mediation; in which case this might rule out e-mediation. In these cases, e-mediator's skills and training will be particularly important to detect these situations.

Another of the disadvantages of mediation is referred to the reduction of the “human factor”. In online mediation takes place what we could call as “virtual contact” between parties and mediator, because it develops by phone, chat, videoconference, internet meeting rooms or so on, instead of physical contact. It is important to note that one of the perceived disadvantage of ODR results from its reduced communication cues. Some online communication possibilities (e-mail, for example) are text-based and do not offer visual contact between parties and mediator. This leads us to the conclusion that should be preferred using online mediation tools as videoconferencing or others with video and audio streaming.

In cases in which between parties there is a significant geographical and cultural distance, online mediation may magnify the issue because disputants can be in different locations around the world. Maybe we can find in this cases lack of warmth, empathy, immediacy, rapport and other attitudes and affects that make face-to-face mediation better for these cases.

There are still serious issues with respect to the data protection and protection of electronic communications. We need high protection to ensure confidentiality and integrity of messages and online communication. Archived materials – preserved as video or text – are always out there. Once a party posts something in a discussion forum or participates in a recorded videoconference, their words are out of their hands forever. While many service providers are explicit about their security procedures, there are no certain guarantees in online mediation.

To conclude, online mediation may lose important information in areas such as body language, non-verbal cues, people are more likely to lie, and presents deficits in privacy and confidentiality, and also has drawbacks due to the culture of internet itself (English language based, faceless, transnational) which can be very difficult to take in some places and cultures.

## **Online mediation challenges**

Nonetheless, online mediation still has a few challenges for its immediate future. These challenges that online mediation faces will include: the lack of human interaction; uneven access to computer resources (“the digital divide”); asymmetry of computer expertise, “the faceless mediator”; infrastructure costs; breaks in communication (how do you know if a party has withdrawn from the mediation?); and enforcement of agreements if claims to jurisdictions will be needed if one party does not fulfill the agreement voluntarily and enforcement is necessary.

In addition, we must learn if things should be different in mediation online versus face-to-face mediation; or if it is more appropriate one general online mediation model, or several models of online mediation tailored to different types of civil and commercial matters. And, of course, what are the elements that make cases suitable for online mediation and how we can predict that handle a case in online mediation will be effective.

## **Final position**

Whatever any doubt, suspicion or personal opinion, online mediation:

- a) is possible, because it’s a reality.
- b) is appropriate, in the field of cross-borders e-commerce and business online mediation could be very attractive after a preliminary study that shows that the cost of litigation does not justify a face-to face mediation.
- c) lowers economic costs.
- d) saves time.
- e) contributes to the real internationalization of mediation.
- f) facilitates and universalizes access to Justice.

## **MEDIATION IN CROSS-BORDER CIVIL AND COMMERCIAL MATTERS: LEGAL BASIS**

The growing interest about online mediation combined with the problems that arise from its practical application have motivated the willingness of establish a legal basis to regulate this conflict resolution mechanism. The ODR Regulation (EU) 524/2013, approved by the European Union on this particular issue, is one recent example. The main objective of the EU with this Regulation is to promote a suitable and effective internal market, reinforcing consumer protection by making available an European ODR platform, that facilitates a fast and fair out-of-court resolution disputes between consumers and traders, concerning online sales or service contracts, i.e., when the trader, or the trader's intermediary, has offered goods or services on a website or by other electronic means and the consumer has ordered such goods or services on that website or by other electronic mean.

The ODR platform would take the form of an interactive website, with a single point of entry, accessible electronically and free-of-charge, in all the official languages of European Union. The main functions of this ODR Platform will be the reception and management of the consumer and traders complaints relating to online transactions (e-commerce), enabling the ADR entities of each country to conduct an online dispute resolution procedure via the platform.

Concerning this procedure, each European country shall elect one ODR contact point which will then be responsible for informing and helping the parties. There will be a list of ADR entities for each country, registered on the ODR platform, specialized in resolving consumer disputes. When the conflict arises, consumer or trader may present a complaint on an electronic form provided by the ODR Platform. The complainant party may attach documents that support the facts and should add information listed in the Annex of the ODR Regulation, in order to identify the legal status of the complainant and the defendant, the type of good or service and the reasons of the complaint. The ODR platform transmits the complaint to the respondent party and indicates to the parties a list of ADR entities that are competent to solve the dispute. It is necessary that the parties agree on the ADR entity that will solve the complaint, otherwise the procedure will not proceed. This may be a flaw of the ODR Regulation because it does not prescribe a substitute criteria to select the competent ADR entity to solve the complaint if the parties fail to agree.

Considering the above mentioned, it is clear that the ODR platform established on the Regulation (EU) 524/2013 does not provide ADR procedures or online mediation to solve e-commerce conflicts. It just manages a complaint system by receiving and sending the complaint to the chosen ADR entity, which will solve the conflict under their own procedures and rules, not necessarily by online mediation. The EU ODR platform is more like an ADR entities network. According to Pablo Cortés (2014), the EU model “may be explained if we consider that the goal of the European Regulation is not to resolve disputes, but to harness the national ADR infrastructure to do so”.

A different model is being designed by UNCITRAL that had established, in 2010, a working group (WGIII) to prepare rules in the field of online dispute resolution (ODR) relating to cross-border electronic commerce transactions, including business-to-business (B2B) and business-to-consumer (B2C) transactions. The drafted UNCITRAL model is based on a multi-step process, beginning with a negotiation stage, continuing to facilitation and ending in a neutral recommendation. The goal of this platform is wider than the EU ODR platform since is not limited to forward the complaint to the competent ADR procedure, but rather supplies a system for generating, sending, receiving, storing, exchanging and processing electronic communications used in ODR processes, allowing the parties to solve the conflict via the platform under the process established by UNCITRAL.

This process shall begin with a first negotiation stage between the parties via the ODR platform. If the parties have not settled their dispute by negotiation, they shall immediately commence a facilitated settlement stage with the intervention of a neutral appointed by the ODR platform. This neutral will communicate with the parties to attempt to reach a settlement agreement. If the parties have not settled their dispute by facilitated settlement, commence the final stage of proceedings. In this third stage, the neutral evaluates the dispute based on the information submitted by the parties and shall make a recommendation in relation to the resolution of the

dispute. If a settlement is reached at any stage of the ODR proceedings, the terms of such settlement shall be recorded on the ODR platform, at which point, the ODR proceedings will automatically terminate.

According to the above description, two different models are perceptible. While the EU ODR platform manages the complaint and forwards it to a different ADR entity that will resolve the conflict under its own procedure, the UNCITRAL platform manages all the conflict resolution process and stages. Regardless of the adopted model, it is certain that the analyzed prescriptions denote the importance of a legal basis for online dispute resolution and especially for online mediation.

## **Recommendations**

Considering the importance of a legal basis to implement online mediation, there are some aspects that should not be forgotten:

1.- The parties must agree on the online mediation process. The enforcement of mediation clauses should be clarified specially on consumer conflicts resulting from adhesion contracts.

2.- It is important to prescribe and protect the confidentiality of the information and documents presented the parties, as well as parties statements. The confidentiality principle is an essential element of a successful mediation because the parties only will disclose their interests if it is ensured that they can talk openly.

3.- The effect of mediation on limitation a prescription periods should also be prescribed in order to ensure that parties who choose the mediation dispute are not subsequently prevented from initiating judicial proceedings or arbitration in relation to that dispute.

4.- The mediation agreements reached online should be enforceable according to the adopted legal criteria.

## **E-MEDIATOR OR MEDIATOR 2.0: LEGAL STATUTE**

The current belief is that the use of "specialist" mediators in corporate cases is more effective than the use of "generalists". Following this reasoning, we can say that online mediators (e-mediators) must be specialists, compared to face-to-face mediators, due to the use of ICT as development tool of the mediation process. Especially when is assumed that online mediation develops between four parties, unlike the face-to-face mediation that requires three parties, namely: parties, mediator and technological support or platform through which electronic mediation takes place. We stress the importance of taking into account that in the landscape of electronic mediation fourth parties are involved: the three typical parties of offline mediation, and the fourth -and new- element "the online technology that supports these three parties", which forms the essential tool of this kind of dispute resolution processes. And also, in some cases, we can find another party, who is the provider of the platform or technology used in e-mediation (this additional distinguished as "fifth party"). Normally, the e-mediator (third party) owns the e-mediation tools (fourth party), but sometimes he uses an external e-mediation platform or internet provider providing them chat, email and/or other communication facilities (e-mediation tools). If Katsh & Rifkin (2001) stated "cyberspace needs resolution process and tools that are independent of jurisdictional questions that basically rely on the party's desire to resolve a matter outside of jurisdictionally bound courts", in the same sense we think that online mediation needs its own individual e-mediators because of the choice of the parties to solve their dispute in e-mediation.

We also consider that it's very important that the e-mediator has got an international certification that proves to the parties his previous trainings and particular skills as professional in online mediation in case of cross-border conflicts. That's the reason why, in the first place, there should be a common legal rules that establish who and how should grant these certifications. Perhaps, and at least for the scope of the European Union, a reference could be the European Code of Conduct for Mediators (2004). This kind of legal professional statutes set out a number of principles to be used by mediators involved in this special type of mediation in which they works. Adherence to this kind of legal statutes is without prejudice to national legislation or rules regulating individual professions.

About e-mediators, these statutes, at least, should regulate:

- a) competence, appointment and fees of e-mediators and promotion of their services.
- b) the circumstances that may, or may be seen to, affect an e-mediator's independence or give rise to a conflict of interests, and how to serve all parties equally with respect to the process of online mediation. Also, should regulate the principle of confidentiality of the e-mediator.
- c) the online mediation process (fairness of the process, procedure, agreement and the causes that lead to the end of the procedure).
- d) data protection and security measures that will be taken during the online mediation procedure using ICT tools.

## Recommendations

- 1.- It's imperative to design a legal statute of the e-mediator linked to a Code of Conduct and Good Practices and the ways of obtaining an international certificate attesting their status as international e-mediator, especially in cross-border civil and commercial matters and disputes.
- 2.- A disadvantage is that the e-mediators chosen by the parties in a cross-border dispute, will not always be experienced in using the e-mediation tools offered by the e-mediation technical supplier who was selected by the parties in dispute. This situation would not be carried out if it is implemented the recommendation mentioned in the above paragraph.
- 3.- There is awareness among the e-mediators that while ICT's have many useful features they are lacking in some respects. E-mediators noted that communication in the broadest possible terms (body language, visual and verbal exchanges) was in some respects limited by the technology. In these situations the training, experience and skills of e-mediators will be especially important to overcome these difficulties.

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# A NEW INSTITUTIONALISM ANALYSIS OF THE LONDON STOCK EXCHANGE YEARS (1914-1939)

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## ABSTRACT

*This paper analyses from the new institutionalism perspective, a caption history of the London Stock Exchange (LSE). This caption covers the Great War and the years in between leading to the outbreak of the WWII. History is selective. The paper draws upon the three schools of new institutionalism and hermeneutic methodology. Hermeneutics forms a mutual synthesis for understanding and a bridge between past and present through an engaged dialect (or fusion of horizons). The paper posits that the LSE survived though its calculus and cultural means of behaviour. This enhanced the LSE's social and economic legitimacy.*

**Keywords:** LSE, New Institutionalism, Hermeneutics, Calculus, Cultural

## INTRODUCTION

The two Wars of the twentieth century heralded the fall of the British Empire. Quite the reverse happened to the London Stock Exchange (LSE). The LSE's presence and legitimacy was strengthened and solidified, as outside the Bank of England, it was now the only institution that had the mandate over War Bonds and the financial markets. From 1914 to 1939 the LSE achieved the social and economic legitimacy. Hermeneutics unveiled the values, traditions, the emerging patterns, the changes in the socio-political and economic landscape in the course of the analysis of the LSE's history from the Great War to 1939. History is after all, a process of selection in terms of historical significance (Carr, 2001). Historical institutionalism dominated the empirical data as it drew upon the calculus perspective of rational choice and cultural approach of sociological institutionalism. As such the empirical data and analysis was dominated by the historical institutionalism approach to institutional analysis. Hobsbawm (2007) argues that history leads to the understanding of the past in light of the present. For everything that happened in the past is history; everything that happens now is history. New institutionalism as a tool shed light into how the LSE dealt with the seismic shifts in the polity. For these institutions are part of history and are living history. To understand how to deal with managerial challenges of the twenty first century one must seek understanding from the institutions of the past that are still dominant in the living present. The LSE has had a dominant role and influence in determining the structure of the modern securities markets, both on a national and international level (Michie, 2005). New institutionalism sheds light on how these institutions dealt with opportunities and threats either through calculus or through cultural behaviours. Good institutions are adaptable. They are responsive to changes in the environment (Peters, 2005). This paper posits that organisations in the twenty first century must endeavour to seek social and economic legitimacy.

## THEORY: NEW INSTITUTIONALISM

There are three schools of thought under new institutionalism. These are namely historical, rational and sociological and all these seek to explain institutional behaviour and why institutions persist over time. The rational approach argues that individual behaviour is shaped/constrained by the institutions and as such the actors realise that their goals can be maximised through institutional action rather than utility maximisation on an individual level (Peters, 2005). In rationalist terms, a good institution is one that is able to curb individual maximisation when that maximisation is on the whole collectively destructive, whereas historical



institutionalism places emphasis on the dominance of decisions, policies made early in the existence of an institution. Sociological institutionalism, like the other two schools, uses formal rules, procedures, norms, symbols, cognitive scripts and moral templates which in essence provide 'frames of meaning' that guide human action (Hall and Taylor, 1996; p947). The three schools of thought anchor the empirical analysis of the LSE. New institutionalism uses both calculus and cultural perspectives to identify the relationship between institutions and actors (Howell, 2007). The calculus approach concentrates on strategic calculation and suggests that individuals seek to maximize the attainment of specific preferences and act accordingly (March and Olson, 1999). The cultural approach argues that behaviour is not totally strategic but is bounded by an individual's world view. Historical institutionalism dominates as it draws on both the calculus perspective of rational choice, and the cultural perspective of the sociological approach. Historical institutionalists are primarily interested in understanding and explaining specific real world political outcomes (Steinmo, 2013).

## METHODOLOGY

The research process was qualitative in nature and meaning was therefore drawn from the data<sup>i</sup>. The paper did not test a hypothesis but sought an understanding of the LSE through the means of new institutionalism. New institutionalism was used as a means concept and not as the end. The original LSE manuscripts held by the City Guildhall Library served as primary data. The records are not available for consultation until they are thirty years old. The records were not in the public domain. The manuscripts that the researcher found invaluable were the General Purposes Committee minutes. The manuscripts dated from 1798 to 1946. These manuscripts were all originals. It was a dialectic two-way process between elements of new institutionalism and the data, the data and elements of new institutionalism. The empirical analysis was also supported by the review on secondary literature done by leading historians on the LSE such as Michie (2005), (Jenkins, 1973) and Roberts and Kynaston (1995)<sup>ii</sup>. The methodical aspects of hermeneutics mapped out the changes in the socio-political and economic landscape in the course of the LSE's history. Juarrero (2000) notes that hermeneutics involves a "continuous dialectic tacking between the most local of local detail and the most global of global structure in such a way as to bring both into view simultaneously" (p.239). This helped, from the new institutionalism perspective, in understanding the LSE in its societal context. Hermeneutics draws its anchor on the histories of the past up to the histories of the present. In textual interpretation, Gadamer (2013) notes "...the anticipation of meaning in which the whole is envisaged becomes explicit understanding in that the parts, which are determined by the whole, themselves determine the whole" (p.259). It is therefore a methodology which focuses on the historical and social context surrounding an action when interpreting a text. It assumes a relationship of experience coupled with the underlying dynamics (Collis and Hussey, 2009). The works of the social critics of the day; Hobsbawm and Carr and were used to map out the changing socio-economic and political landscape. The LSE was influenced by and reacted to changes in the securities market caused by variables realised on socio-economic and political levels.

## RESULTS AND DISCUSSION

The next section covers the empirical analysis of the LSE through the means on new institutionalism. New institutionalism was used as an interpretative tool of analysis, analysing what was deemed as elements of new institutionalism in the course of history of the LSE, from the outbreak of the Great War and the years leading to 1939. The analysis is in threefold. The first part covers the analysis from the historical institutionalism perspective and the second is from the rational choice perspective. The third part is from the sociological institutionalism.

### Historical institutionalism

In the pre-Great War World years up to 1913, Britain experienced prosperity<sup>iii</sup>, but with the exception of the LSE, which experienced a period of gloom and anxiety over the rumours of what was widely viewed as an impending war<sup>iv</sup>. Germany declared war on Russia on the 1st, France on 3rd and invaded Belgium on the same date (Roberts and Kynaston, 1995)<sup>v</sup>. On Tuesday the 14th of August 1914, Britain declared war on Germany (Rosenberg and Hopkins, 1937). On the 6th August 1914, the LSE received a letter from New Scotland Yard requesting the former to furnish the Yard with "all the names, addresses and the nationalities of all the Foreign

Clerks employed by the Members of the Stock Exchange, whether admitted or not admitted, naturalised or not naturalised"<sup>vi</sup>. Hall and Taylor (1998) posited that historical institutionalism, unlike sociological or rational schools of thought, explains how institutions can be constitutive of political agency. In their view, historical institutionalism has the ability to show how institutions confer power/authority on some actors while reducing the power of others (ibid). They argued that power or political power fundamentally involves moving a number of actors in a certain direction in order to achieve a political outcome. In the LSE's case, this meant demarcating between the natives and the 'aliens' (foreign born clerks). The 'moving a number of actors in a certain direction to achieve a political outcome' can be seen through the purging of foreign clerks.

Five days before the outbreak of the Great War, the LSE was closed sine die<sup>vii</sup>. When the war broke out the LSE was closed for five months (Rosenberg and Hopkins, 1937). The financial market was thrown into chaos as one-third of the bills of exchange that were then in circulation were due for redemption by Germany, Austria and Russia. In late November of 1914, the Committee For General Purposes drew up draft regulations for the re-opening of the LSE on the 4th January 1915. Amongst its new rules, only the following were to be admitted namely, British born Members or Clerks, Naturalised Members or Clerks who had duly exhibited their letters of Naturalisation to the Committee, and in the case of Naturalised Clerks or Members of Austrian or German origin, had satisfied the Committee that they have been de-nationalised in their country of origin (Hennessy, 1978)<sup>viii</sup>. According to the Treasury the main objective of the temporary regulations and restrictions in the conditions of re-opening the LSE was (a) "To safeguard the London Market against operations for the purposes of depressing prices' and (b) 'To close the Market absolutely to the enemy both directly and indirectly"<sup>ix</sup>. In practice the LSE undertook the role of being an economic watchdog for the Government, safeguarding Britain's economic interests during the time of the Great War. It had in a sense achieved social and economic "legitimacy". In explaining the structure-agency problem through historical institutionalism, Hall and Taylor (1996) argued that 'political institutions tend to confer status as legitimate political actors on some groups or social identities while withholding it from others' (p961). The War brought many economic changes and the rise of a new and little-informed investor<sup>x</sup>. The LSE was thrust forward to assume an active role, and its importance grew to national proportions<sup>xi</sup>. From 1914 to 1945 and after the end of the Second World War, War Bonds were part and parcel of the LSE's course of business<sup>xii</sup>. In the pre-war years of 1913, 1914, the LSE posted net profits of £218864 and £194690 respectively. By 1917 and 1918, its annual profits had fallen to £13886 and £15895 respectively.

In the sixty years before Great War of 1914, the City of London was largely unregulated by the State. Institutions were self-regulatory and control rested with membership. Decisions were made that reflected self-interests in a competitive market where it was virtually impossible to ignore the needs of the market and as such institutions had to learn to adjust accordingly (Michie, 2005; Roberts and Kynaston, 1995). There was reluctance or limited supervision and control by the government or institutions concerned. Thus 'individuals were left to profit from, or suffer by, the consequences of their own actions, with only the more flagrant abuses being punished and curtailed' (Michie, 2005; p191). International trade exchange controls were either absent or limited, thus promoting free movement of capital, goods and labour, leading to the establishment of world markets and competitive centres. However the next sixty years after 1914 were characterised by heavy regulations as the Great War thwarted the global markets created before 1914. As a result of heavy regulation and intensive exchange controls global markets became compartmentalised and tended to be internalised (ibid). The UK, once the biggest creditor in the world, had now become the biggest debtor, with interest payments exceeding forty percent of all Government expenditure. The post-Great War policies changed as the State became involved in the aggregate health and management of the economy as a whole. It was within this new world order that the LSE recovered such that as early as 1920, it had now regained its pre-Great War prominence<sup>xiii</sup> as the largest financial institution in the world<sup>xiv</sup>. The LSE was closed on Monday the 21st September 1931 upon the request of the Deputy-Governor of the Bank of England as on that particular Monday, the Government was to announce Britain's withdrawal from the Gold Standard<sup>xv</sup>. Two reasons caused the illiquidity of London as an international financial centre in the midst of 1931<sup>xvi</sup>. The post-Great War years, particularly the 1920s and the growth of London as an international centre, had left the UK with short liabilities in great excess of the gold and foreign reserves held by the Bank of England (Roberts and Kynaston, 1995; Hennessy, 1992). Secondly the collapse of the European Credit Anstalt led to an immediate freezing of London claims, with those in Vienna<sup>xvii</sup> followed by Berlin. The crisis in Europe, the loss of confidence in the U.K. due to the budget deficit<sup>xviii</sup>, London's financial crunch ultimately served the death knell upon the Gold Standard<sup>xix</sup> (Sayers, 1976; Andreades, 1966; Rosenberg and Hopkins, 1937). It was felt that it was in the best interest of

Britain that the LSE should be closed on the Monday the announcement was to be made. The market on the whole was temporarily suspended<sup>xx</sup>. The Gold Standard was suspended on Saturday the 19th of September 1931<sup>xxi</sup> (Robert and Kynaston, 1995; Hennessy, 1992; Rosenberg and Hopkins, 1937). The LSE was re-opened on Wednesday the 23rd of September 1931. Its re-opening was marked by a sensational rise in the prices of industrial securities<sup>xxii</sup>. Britain's sudden withdrawal from Gold Standard and temporary closure of the LSE underpins Underhill's (1991) criticism of the laissez-faire market system "the political success of laissez-faire contained the seeds of its own demise. The establishment of a market economy and society had unforeseen political consequences...the market economy had required prior political conditions for its establishment and needed state enforcement" (p.199). Thus 'the state found itself in the unenviable position of having to manage the political ramifications of the functioning of the very markets it sought to enforce' (ibid).

Germany invaded Poland on the 1st of September 1939. On the 3rd Britain and France declared war on Germany (Roberts and Kynaston, 1995)<sup>xxiii</sup>. Unlike the Great War, the LSE was prepared for the outbreak of the Second World War. The LSE was shut on 1st of September 1939<sup>xxiv</sup> and the Emergency Committee was bestowed its full powers to act on behalf of the Committee for General Purposes<sup>xxv</sup>. It was duly re-opened on September the 6th (Hennessy, 1978). Business was mainly on a per agreed cash basis and Saturday business was stopped. It was through these preparations that the LSE re-emerged as an effective market (Sayers, 1976). Temporary Regulations for governing the LSE were put into immediate effect<sup>xxvi</sup>. Peters (2005) argued that even if the initial choices were deemed appropriate at that time, changing political environment makes change a necessity and good institutions are those that are able to change and adapt with the changing environment.

## Rational choice institutionalism

In the 1920s, the Trustees and Managers, who were the financial authority of the LSE on behalf of the Proprietors, felt that insurance against business risks was a matter for the Members, as individuals, and not a collective concern for the LSE as an institution<sup>xxvii</sup>. The LSE's lack of calculus foresight in indemnifying its Members against business risks almost became its undoing as a result of the Hatry scandal. Mr C.C Hatry and three others had admitted to fraudulent activities<sup>xxviii</sup>. The fraudulent activities - which were in excess of a million pounds had been executed through Hatry's group of companies through the duplication or over-issuing of shares<sup>xxix</sup>. As a consequence trading on the Hatry Companies was then suspended. Members and Banks made voluntary donations to a scheme of compensation that was drawn up in order to alleviate what the LSE saw as a potential disaster to itself and the reputation of the City as a whole. After arbitration, the losses from the Hatry scandal were borne amongst the parties on a pro rata basis in order to fund the compensation scheme. Justice Avory, the Judge sentenced Hatry to fourteen years in prison. Ingram and Clay posited Williamson's (1994) warn that the lack of credible commitment from the possibility of opportunism lies at the heart of new institutionalism. In this light, it then follows that Hatry had no incentive to honour his contractual obligations as far as the matters of the LSE were concerned. Within the rational institutionalism settings, good institutions are those that are able to limit individual maximisation when that maximisation is collectively destructive (Peters, 2005). In March 1934 the LSE Official Year Book was created. The LSE Official Year Book was issued under the sanction of the Committee for General Purposes. According to the LSE Rules, Members were barred from engaging in any other type of business other than that of the LSE<sup>xxx</sup>. Jobbers and LSE Members were also barred from engaging in business with non-members in Great Britain whilst under the London market rules; they were allowed to engage in arbitrary business outside Great Britain with a non-member<sup>xxxi</sup>. Members were also banned from operating in dual capacities as both brokers and jobbers<sup>xxxii</sup>. This was a calculus move by the LSE in order for it to dominate and close the London market from non-members. The LSE had satisfactory business after the 1931 crisis and before the outbreak of the Second World War<sup>xxxiii</sup>. The Committee of the LSE had full powers to regulate the business, including the making of rules and regulations and their enforcement. The Committee was under no obligation to give reasons for its decisions to Members and according to the quote in the text "its powers are very great and in practice sanctions have rarely been used"<sup>xxxiv</sup>. A good institution is one that is capable of making rules that constrain individual maximisation when maximisation is collectively destructive, and which can enforce its rules and regulations (Peters, 2005). In this light, the Committee's immense powers were meant to make the rewards outweigh the temptation so as to minimise the Members' defection.

## Sociological institutionalism

In May of 1915, the naturalised members of the LSE signed an oath of allegiance to the His Majesty the King and further expressed their disapproval of Germanic methods of warfare<sup>xxxv</sup>. This was partly due to the feeling that the public expected naturalised members to take such oath and partly because various public bodies had undertaken steps to differentiate between natural born British citizen subjects and naturalised British subjects (ibid). As was in the custom and tradition of the LSE, a gentleman's word was taken in good faith and as such an oath of allegiance to the Crown was as good as the motto "my word is my bond". This reflected the cultural aspect of the LSE. It is the cultural and calculus approaches that formulate the institutional routine scripts, customs, and procedures, formal and informal rules. These in turn, determine the route taken in the decision-making process. The Lord Mayor's letter of 4th June 1915 highlighted the LSE's unquestionable, traditional loyalty to the Crown. This letter was addressed to the LSE, regarding the proposed form for voluntary registration for public service by members of the LSE:

I naturally approach the Stock Exchange first, not only because of its traditional loyalty and patriotism but because it is an organised community and therefore more easily dealt with than other professions and trades, which have no central or unified constitution<sup>xxxvi</sup>.

In sociological institutionalism, organisations adopt new institutional practices, embracing specific institutional norms and practices as these enhance the social legitimacy or 'logic of social appropriateness' of the organisations and its actors (Hall and Taylor, 1996). Arguably in the LSE's case the endorsement of 'social legitimacy' or 'social appropriateness' can be deciphered in the Lord Mayor's words; "traditional loyalty and patriotism...organised community...unified constitution". As the war intensified, the LSE advised Members of enemy birth (Austrian or German) to stay away from the House for the sake of their safety. This was due to the fact that feelings at LSE were running high<sup>xxxvii</sup>. A group of Members who styled themselves as the Anti-German Union succeeded in preventing those of alien birth from being re-elected (Jenkins, 1973). Tensions were further exacerbated through the sinking of the ocean liner, Lusitania, with one Member of enemy birth origin rumoured to have been overheard saying that the sinking of the liner was justified<sup>xxxviii</sup>. Numerous Members who were of German or Austrian birth had their membership to the LSE renounced and were not re-elected. It was not enough for a Member of the House to be a British subject or for one's family to have lived in Britain for countless generations: spy-mania was rampant (Jenkins, 1973; Hennessy, 1978).

**Table 1: Summary of major issues and findings**

Time Period	Historical Institutionalism	Rational Choice	Sociological Choice
The Great War	LSE achieves social and economic legitimacy, heavy State regulation, LSE resilient, calculus behaviours of the LSE		Cultural behaviour of LSE members, logic of social legitimacy/social appropriateness
Withdrawal From the Gold Standard (1931)	Illiquidity of London, rise in the prices of industrial securities.		
Hatry Scandal		Calculus behaviour of C.C Hatry,	
LSE Official Year Book (1934)		Calculus behaviour of the LSE, dominance over the London market , Committee had draconian powers	
WWII	LSE was prepared for the outbreak, LSE resilient and adapted to change, markets became more compartmentalised		

## CONCLUSIONS

The LSE survived the World Wars of the twentieth century, survived the Gold Standard and the Great Depression. During the two Wars the ruling governments used the LSE as an official arm of the state. This enhanced its social and economic legitimacy. In times of peace, it was let alone to run the markets as it saw fit. The Great War weakened the Empires of the old. A new world came into play with America in forefront. Britain had lost its dominance as an empire. However by 1922 the LSE had achieved its former pre Great War dominance as the leading Exchange of its kind in the world. As evidenced in this paper, the three schools under new institutionalism through their calculus and cultural means can be used as effective tool when dealing institutions, when seeking to understand their behaviour. It is a useful governance theory which can help in institutional behaviour and analysis in an ever-changing social, economic and political global landscape. In essence the methodological approach of hermeneutics and the new institutionalism theory solidified the empirical analysis. From the empirical analysis of the LSE, one can posit that to a certain extent, the success of institutions depends on their ability to enhance their economic and legitimacy through the calculus and cultural means. Peters (2005) argued that even if the initial choices/policies were deemed appropriate at that time, changing political environment makes change a necessity and good institutions are those that are able to change and adapt with the changing environment. Adaptive institutions survive and persist over time. Indeed institutions are seen as relatively persistent features of the central landscape (Hall and Taylor, 1998). This is further echoed by North (1991) that "they (institutions) evolve incrementally, connecting the past with the present and the future; history in consequence is largely a story of institutional evolution in which the performance of economies can only be understood as a part of a sequential story" (p.16).

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## ENDNOTES

- i. Data analysis and interpretation became an ongoing activity and what was meaningful emerged from the data. Hence the process was inductive in nature
- ii. The then New York Times and the Times of the day were used to support the Minutes in order to give a more refined and balanced analysis.
- iii. Treasury Memorandum on the Gold Reserves, 22 May 1914; (Sayers, 1976)
- iv. The New York Times, 16 January 1914 p2
- v. The Great War, argued Carr (2001) was not precisely a world war, but a European civil war - assuming that such an entity as Europe existed, but ‘...it had worldwide consequences; these included the stimulation of industrial development in many Asian countries, of anti foreign feeling in China and of Indian nationalism, and the birth of Arab nationalism’ (p143).
- vi. LSE: Committee For General Purposes Minutes, 6th August 1914, p185
- vii. The Times, 31 July 1922, p13
- viii. LSE: Committee For General Purposes Minutes, 28 December 1914, p10
- ix. Ibid., 23 December 1914, p357
- x. The Times, 26 March 1936, p15
- xi. Ibid., 25 November 1914, p3
- xii. Ibid., 17 February 1931, p43., 21 February 1931 p29., 28 August 1922 p19., 7 April 1924 p25
- xiii. The New York Times, 18 September 1922 p23., 30 January 1921 pE6
- xiv. LSE: Committee For General Purposes Minutes, 3 May 1921, p342
- xv. Ibid., 21st September 1931, p113
- xvi. Ibid., 7 August 1931, p24
- xvii. The New York Times, 19 September 1931 p1
- xviii. Evidence by the Governors and others to the Committee Evidence by the Governors and others to the Committee on Finance and Industry (Macmillan Committee) 1929-31. Macmillan Evidence: on Finance

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- xix. The New York Times, 29 August 1931, p22..., 3 August 1931 p20..., 3 August 1931 p16..., 20 August 1931 p9..., 28 August 1931 p8
  - xx. The New York Times, 3 September 1939, pF2
  - xxi. LSE: Committee For General Purposes Minutes, 22nd September 1931, p121
  - xxii. The New York Times, 24 September 1941, p42
  - xxiii. Hobsbawm (2007) noted that it was easier to see why civilisation receded between the Treaty of Versailles and the fall of the bomb on Hiroshima. ‘...the fact that the Second World War, unlike the First, was fought on one side by belligerents who specifically rejected the values of nineteenth-century civilisation and the Enlightenment speaks for itself. We may need to explain why the nineteenth-century civilisation did not recover from the First World War, as many expected it to do. But we know it didn’t’ (p342).
  - xxiv. LSE: Committee For General Purposes Minutes, 31st August 1939, p341
  - xxv. Ibid., 31st August 1939, p342
  - xxvi. Ibid., 5th September 1939, p345.
  - xxvii. Ibid., 23 July 1928, p49
  - xxviii. The New York Times, 21 September 1929 p1..., 21 September 1929 p1..., 22 September 1929 p6...26 September 1929 p12..., 29 September 1929 p18..., 12 October 1929 p2..., 16 October 1929 p20
  - xxix. Ibid., 20 September 1929, p91
  - xxx. Ibid., 23rd July 1934, p334
  - xxxi. LSE: Committee For General Purposes Minutes, 27th August 1934, p339
  - xxxii. Ibid., 15th July 1935, p39
  - xxxiii. Ibid., 6th July 1942, p417..., 10 July 1942 p296..., 16 July 1942 p200..., 20 July 1942 p220
  - xxxiv. Ibid., 6th July 1942, p421.
  - xxxv. Ibid., 12th May 1915, p145
  - xxxvi. Ibid., 7th June 1915, p207
  - xxxvii. Ibid., 8th May 1916, p360
  - xxxviii. Ibid., 6th March 1916, p65

# **CHINESE LOANS IN LATIN AMERICA – COMPARISON WITH THE WORLD BANK AND THE INTER-AMERICAN DEVELOPMENT BANK**

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## **ABSTRACT**

*China is one of the most dynamic players within the world economy. It is an important partner not only in international trade but it is also a significant loan provider which contributes by providing the loans to the economic development of the recipients. Chinese activities in this field in the region of Latin America are analysed in a following paper. First, the institutional framework and conditionality of providing the loans is mapped. Second, the volume, sector and country orientation of Chinese loans provided are compared to the World Bank and to the Inter-American Development Bank.*

*Keywords:* China, Latin America, loans, the World Bank, the IDB

## **INTRODUCTION**

Latin American region belongs to the developing part of the world in which according to many economists much potential is hidden. The combination of a lack of financial sources for the economic and social development on one hand and the economic potential in form of large raw materials reserves and a market with huge consumption potential on the other, leads to the attention which other players in the field of the world economy pay to this region.

One of these players is China, one of the most dynamic growing economies in the world with financial surpluses coming from its successes in the international trade and, country which has built its achievements on exports and extensive production which needs for its further growth and development more and more intensive supplies of raw materials from abroad.

This paper is focused on Chinese loans provided to Latin American countries, specifically on development loans which are within the Chinese terminology considered as development aid. The aim of this paper is to map the Chinese activities in the field of providing the development loans to Latin America. To assess them the comparison between Chinese loans, loans of the World Bank and the Inter-American Development Bank will be done.

The paper is divided into two parts. The first one concentrates on the Chinese institutional framework for providing the (development) loans and the development assistance in general. There is analyzed which institutions are responsible for providing the assistance and loans and under what conditions.

The second part aims at the comparison of the loans provided by the Chinese institutions, i.e. Export-Import Bank of China (China Eximbank) and the China Development Bank (CDB), and by the two other providers – the World Bank and the Inter-American Development Bank (IDB). The analyses of total amounts of resources, sectors of interest and recipient countries are made.



Information used in the paper is gained from a Chinese government and state owned institutions, web databases and reports of the World Bank and the IDB. The author also works with data obtained from a variety of specialized papers and publications.

## **CHINESE INSTITUTIONAL FRAMEWORK FOR PROVIDING DEVELOPMENT ASSISTANCE AND DEVELOPMENT LOANS**

The Chinese framework for providing development loans as a form of development assistance is relatively unclear compared to the developed world. The State Council of the PRC has the authority to decide on strategies for international relations, including the development loans/assistance. The Ministry of Foreign Affairs (MFA) acts as an intermediary between China and the recipient countries of Chinese development loans/assistance. The Ministry of Foreign Affairs also plays an advisory role in making the project agreements with the recipient countries and sends its representatives to international conferences dealing with an international development policy. The State Council and the Ministry of Foreign Affairs act as the governing bodies responsible for setting up rules and policies for Chinese international development cooperation. The Ministry of Finance (MOF) is responsible for the allocation of resources to subordinate bodies involved in economic and development cooperation. These include in particular the Ministry of Commerce (MOFCOM), the Export-Import Bank of China (China Eximbank) and the China Development Bank (CDB).

The Ministry of Commerce is responsible for all international capital transactions with a grant element. The Ministry of Commerce has created a number of subordinate institutions, which are responsible for carrying out the Chinese foreign development policy. It includes the Executive Bureau of International Economic Cooperation which was given the authority to manage, implement and evaluate the Chinese development projects at the operational level. The department for Outward Investment and Economic Cooperation then manages and oversees the Chinese companies involved in projects in Latin America. The America and Oceania Affairs Division has a purely advisory role in the field of Chinese development assistance in Latin America.

Two Chinese banks are responsible for providing loans. The first, Chinese Eximbank provides subsidized loans for development projects and low-interest loans for developing countries buying Chinese products and technologies. The Eximbank receives interest subsidies from the Ministry of Finance or the Ministry of Commerce. The second institution is the China Development Bank (Sangmeister, 2013, p. 3). Both banks were created in the reform period in 1994 as the main tools of government banking, finance, development and investment policies (Bräutigam, 2009, p. 79). In 2010 these two banks provided in total more resources in the form of loans than the World Bank, Inter-American Development Bank and the Export-Import Bank of the USA combined. The total sum of loans provided by China was 75 billion USD (Gallagher, Irwin and Koleski, 2012).

## **CONDITIONALITY OF CHINESE DEVELOPMENT LOANS**

Based on the principle of a mutual benefit, China, as a provider of the development assistance, requires gaining some benefit or profit. This is relatively often criticized by international organizations and traditional providers of development assistance, because development assistance is generally understood as the aid to the developing countries for humanitarian or development purposes (Sangmeister, 2013, p. 2). Therefore a question arises whether a project which is not only beneficial to the receiving side, but also to the provider itself, should be called "development" and whether it is an "aid" or an "assistance" when it brings benefits to both parties. If we look at the whole issue from China's point of view, we have to admit that such behaviour is not unreasonable. China considers itself as a developing country and no doubt it is so according to the statistics of the western world. Not long ago it had been mentioned only as a net recipient of development assistance, now it provides to other countries. In such context, it seems rather pointless to criticize China for requiring something back for its resources. The question is rather of philosophical nature and concerns rather the naming convention of Chinese activities in relation to other developing countries and other donors.

For providing a loan China makes no political requests, but asks for economic benefits. Several countries in the Latin American region appreciate such an approach (e.g. Venezuela, Brazil, Argentina and Ecuador). These countries prefer the Chinese approach that does not require political compromises or reforms, and which is based almost exclusively on economic decisions. Those countries received 91% of all Chinese loans designated for Latin America between 2005 and 2011. On the other hand, traditional U.S. allies prefer using the opportunity to receive loans from the leader of the continent. This group includes countries such as Peru, Chile, Panama and Mexico. It is evident that a nature of regimes which are active within the Latin American region is crucial for making a decision which of the two big partners within the international relations to take advantage of. State regimes based on democratic principles do not have problems with requirements imposed by western donors. On the other hand, countries that would have to change the nature of their political regimes dramatically or should implement significant reforms prefer development cooperation with China and other non-Western donors.

PRC allows its provided loans to be compensated by purchasing Chinese goods, implementation of development projects by Chinese companies or concessionary purchasing of raw materials.

The first case, i.e. at least partially offset from debt by purchasing Chinese products can be illustrated by the example of Argentina, which in 2010 received from CDB a loan in the amount of 3 billion USD. This loan is conditioned by the Argentine demand for Chinese trains in the future (Hilton, 2013, p. 3).

Another option for China to benefit might be a requirement for the implementation of the project by Chinese companies. An example could be a loan in the amount of 1.68 billion USD provided by CDB to Brazil for constructing a hydroelectric plant in the Amazon. The project should be fulfilled by the Chinese company Sinohydro Corp (Gill and Sanderson, 2011).

Since 2006 most of Chinese loans in the Latin American region were provided to enable more Chinese companies to gain access directly to the mining sector or to secure cheaper purchases of raw materials. 91% of these loans were provided to four countries - Argentina, Ecuador, Venezuela and Brazil - and they were achieved as follows. CDB or Eximbank provides a loan and requires getting a given quantity of raw materials, such as oil, for every day of drawing the loan. China would pay the market price for it. The money would not go to the country exporting the raw materials, but straight to the Chinese bank (CDB/Eximbank), which deletes part of the debt. Such an obligation of the borrower thus guarantees China a smooth import of raw materials needed for its further development (for example oil obtained thru these activities makes up half of China's total annual oil imports) (Gallagher, Irwin and Koleski, 2012, p. 14).

## **COMPARISON OF LOANS PROVIDED BY CHINA, THE WORLD BANK AND IDB**

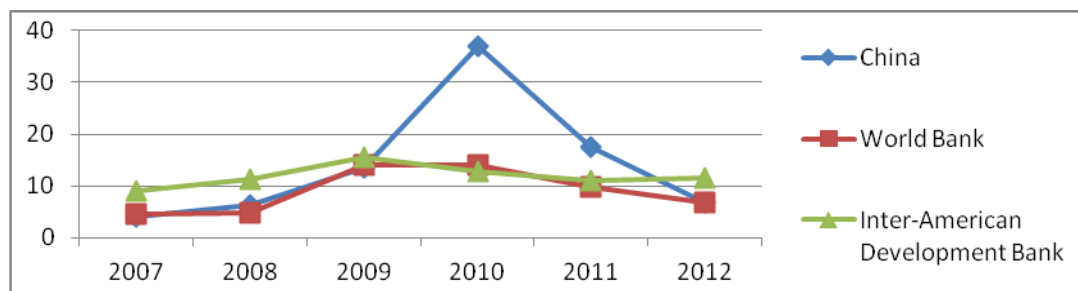
China is not the only partner of Latin American countries for providing the international loans. There are three other major players: (1) the World Bank, (2) Inter-American Development Bank (IDB) and (3) Export-Import Bank of United States. Because US Ex-Im Bank provides mostly loans which cannot be described as development, in following comparison only the World Bank and IDB will be considered.

First, let's compare the total amount of financial resources provided as international loans by the three parties. It is clear that all the three players do not provide the development loans only. Because of different classification of such loans and unclear information about the Chinese once, the decision was made to include all the loans they all provided to the Latin American region.

The period of six years between 2007 and 2012 is considered. Of course, we have to take into consideration that this period brought many important affairs in an area of natural disasters and an environmental area, and changes in the field of trade, industry and politics in the world economy.

“China”, as a name for one of the data series, represents the two state institutions providing the Chinese development loans, which were mentioned above, i.e. China Development Bank and Export-Import Bank of China. The comparison is illustrated in the Figure 1 below.

**Figure 1: Comparison of amounts of financial resources from China, WB and IDB**



Source: own, based on:

<http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/EXTANNREP/0,,menuPK:1397243~pagePK:64168427~piPK:64168435~theSitePK:1397226,00.html>, The World Bank, March 8, 2014; <http://www.iadb.org/en/about-us/annual-reports,6293.html>, The Inter-American Development Bank, March 8, 2014 ; [http://thedialogue.org/map\\_list](http://thedialogue.org/map_list), Inter-American Dialogue, March 8, 2014.

It could be expected that the two western organisations, the World Bank and the IDB, will have more financial resources and available than China, still a developing country itself. However, based on the relevant data it is clear, that Chinese institutions together are one of the most important sources for providing the loans to Latin America. It provides very similar amount of loans in terms of its value compared to the World Bank. There is a huge leap in 2010 and 2011. The visible jump in 2010 was caused mainly by Chinese loans of a high value focused on infrastructure (for example infrastructure project in Venezuela for 20 billion USD) and transport (10 billion USD project in Argentina). 2011 was still affected by the world crisis to a large extend. The level of loans provided by IDB is more stable than the ones of the two other players.

**Table 1: Bank Loans to Latin America by Sector, 2007-2012**

Sector	China	WB	IDB
Infrastructure, Transportation, Housing	49,02	8,26	12,53
Energy, Mining	23,96	2,82	8,31
Finance, Trade	12,10	6,64	8,2
Health	---	10,89	1,48
Education	---	4,45	3,29
Environment	---	5,35	11,13
Public Administration	---	12,05	8,28
Agriculture	---	2,80	2,68
Other	0,31	1,20	14,85
TOTAL	85,39	54,46	70,75

Source: own, based on:

<http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/EXTANNREP/0,,menuPK:1397243~pagePK:64168427~piPK:64168435~theSitePK:1397226,00.html>, The World Bank, March 8, 2014; <http://www.iadb.org/en/about-us/annual-reports,6293.html>, The Inter-American Development Bank, March 8, 2014 ; [http://thedialogue.org/map\\_list](http://thedialogue.org/map_list), Inter-American Dialogue, March 8, 2014.

The sector-based comparison of the three players is made in the Table 1 above. There are several sectors determined in the first column. The data come from annual reports of individual organizations, which use in their

terminology different kind of sectors and purposes of providing of the loans. Therefore the brand new list of the sectors was established.

Based on the data it is clear that China is the one which resources are the least diversified. The projects in infrastructure, transportation, mining and trade related area are of the highest importance and interest for it. It does not care about the social issues connected with education, public health or environment. This goes hand in hand with the Chinese approach based on mutual benefit principle. These areas could be potentially profitable for China, which can later do a business with Latin American business partners, and for Chinese companies, which can participate on a realization of the projects of a high value.

According to statements of China Ex-Im Bank the project supported by a Chinese loan should bring economic benefits and be the starting point for building new job opportunities in the recipient country. Chinese companies should be selected as suppliers of equipment or services, or as production partners. At least 50% of the contracted goods and services needed to realize the project should come from China. The loan also should not be lower than 20 million RMB (approximately 2.4 million USD) (China Exim Bank, 2013). Infrastructure, energy, transport and telecommunications are identified by the Chinese government as the main sectors for the project achievement (almost 90% loans provided by Chinese banks are connected to such projects – Hilton, 2013, p. 3).

On the opposite site, the WB puts more money into public health related projects than into infrastructure and the IDB provides loans of the almost same value for the infrastructure and environment projects. Both the WB and the IDB provide their loans to support the development of Latin American public administration. This is connected with the social-political conditions which are often stated for the loan realization.

Of course, China is not the only one who takes care about its own benefit. When comparing the three institutions the three different positions of the providers have to be taken into consideration. China is perceived as a great business partner, the World Bank is the organization which cares about the health, literacy and education in the world and IDB is kind of regional organization which points of interest are besides trade support to build a good infrastructure net across the continent and to ensure the environmental sustainability.

Table 2, on the next page, maps the activities of Chinese international loan providers (CDB and Chinese Ex-Im Bank) and IDB in terms of receiving country orientation in the period 2007-2012. As we can see there are some similarities and differences between the two loan providers.

China focuses mainly on couple of countries and has realized some projects of a lower value also in some other countries. The countries of China's interest are Venezuela (10 projects), Brazil (5 projects), Argentina (4 projects) and Ecuador (8 projects) which borrowed 33,3 billion USD used for Chinese loans in Latin America (whereas Venezuelan projects are of a value of 44,5 billion USD). It is obvious that China focuses on such recipients which are rich on natural resources and have potential for future mutual business cooperation.

The IDB's coverage is much broader – besides Brazil and Argentina, which are also important recipients of the IDB's loans, IDB provides relatively large financial sums also to Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Panama, Peru and Venezuela. There is one more very important recipient – Mexico. In a given period IDB provided loans of a value of 11 billion USD to Mexico, whereas China provided 1 billion USD only. This exemplifies the attempts of the North America to keep the influence in the region by supporting Mexican trade and social development. Also the large diversification of the IDB's affirms these attempts of USA in Latin America as well as its efforts to support the regional development in general. On the other hand the IDB's presence in some countries is much weaker than that of China – for example in Venezuela or Ecuador.

## CONCLUSION

There are several crucial governmental institution in China which decide on providing Chinese development assistance: the State Council of the PRC, the Ministry of Foreign Affairs, the Ministry of Finance and the Ministry of Commerce, as well as two major financial institutions which are focused mostly just on providing the

development assistance including the development loans: The Export Import Bank of China (China Eximbank) and the China Development Bank (CDB). China understands that providing the development assistance as a help of one state, i.e. one government, to another country, i.e. its government. Therefore it is providing the development assistance organized exclusively through the channels mentioned above.

**Table 2: Bank Loans to Latin America by Country, 2007-2012**

Recipient country	CDB and Ex-Im Bank/IDB							Number of Chinese projects
	Amount (Billion USD)							
	2007	2008	2009	2010	2011	2012	Total	
Argentina	NA/2,4	NA/1,2	NA/1,2	10,4/1,3	1,4/1,4	NA/1,6	11,8/9,1	4
Bahamas		NA/0,1		NA/0,1	2,5/NA		2,5/0,2	3
Bolivia			0,1/0,2	0,3/0,3	0,3/0,3	NA/0,2	0,7/1	3
Brazil	NA/1,7	NA/3,3	10,3/2,3	1,2/2,2	0,4/2	NA/3,0	12,1/14,5	5
Chile					NA/0,2		0,2/0	1
Colombia	NA/0,8	NA/1,1	0,8/0,7	NA/0,8	NA/0,5	NA/1,3	0,1/5,2	1
Costa Rica	NA/0,5	0,3/0,9		NA/0,1	NA/0,7		0,3/2,2	1
Dominican Rep.			NA/0,3	NA/0,5	NA/0,4	NA/1,0	0/2,2	
Ecuador	NA/0,5		1/0,5	3,3/0,6	3/0,4	2,1/0,5	9,3/2,5	8
El Salvador		NA/0,6	NA/0,4	NA/0,3	NA/0,3	NA/0,3	0/1,9	
Guatemala	NA/0,2	NA/0,3	NA/0,3		NA/0,2	NA/0,7	0/1,7	
Guayana						0,1/NA	0,1/0	1
Haiti				NA/0,2	NA/0,2		0/0,4	
Honduras		NA/0,1	NA/0,4	NA/0,2	NA/0,2		0/0,9	
Jamaica		NA/0,2	0,1/0,6	0,4/0,3	NA/0,1	NA/0,4	0,7/1,5	6
Mexico	NA/0,7	NA/1,1	1/3	NA/1,6	NA/1,5	3,1/3,1	1/11	1
Nicaragua			NA/0,2	NA/0,1	NA/0,3	NA/0,2	0/0,8	
Panama	NA/0,2	NA/0,6	NA/0,3	NA/0,2	NA/0,5	NA/0,7	0/2,5	
Paraguay			NA/0,2	NA/0,2	NA/0,2	NA/0,2	0/0,8	
Peru	NA/0,9	NA/0,2	0,1/0,3	NA/0,5	0,2/0,3	0,1/0,4	2,3/2,6	4
Trinidad and Tobago			NA/0,1	NA/0,3	NA/0,2		0/0,6	
Uruguay	NA/0,1	NA/0,4		NA/0,3	NA/0,6	NA/0,3	0,1/1,7	1
Venezuela	NA/0,2		1/0,9	21,5/0,1	9,5/0,4	4,5/1	44,5/2,6	10

Source: own, based on:

<http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/EXTANNREP/0,,menuPK:1397243~pagePK:64168427~piPK:64168435~theSitePK:1397226,00.html>, The World Bank, March 8, 2014;  
<http://www.iadb.org/en/about-us/annual-reports,6293.html>, The Inter-American Development Bank, March 8, 2014 ; [http://thedialogue.org/map\\_list](http://thedialogue.org/map_list), Inter-American Dialogue, March 8, 2014.

China does not put any politically oriented requirements for providing a loan (except recognition of the One China Policy which is also a Chinese start-up requirement for an establishment of the international relationship with a foreign country as such. On the other hand China requires getting back a benefit for its financial resources. That could be done in a couple of ways: purchase/procurement of raw materials, exports of Chinese goods or the realization of development projects by Chinese companies.

One of the forms of the Chinese development assistance (but not in concept OECD) is to provide preferential loans with low or zero interest. The Chinese development assistance is for many countries with the last possible option for the implementing the development projects and the recipient countries are finally those, who decide to accept Chinese conditions.

The answer to the question whether the development loans should be considered development assistance is not clear. The points of view of Chinese government and the international organization differ in many points. The main difference lies in an issue of a grant element. There is no need to include it in Chinese loans but it is necessary to include it to count as a development assistance according to OECD or other international organizations. The Chinese definition is much looser – there are several ways how to count the loan as the development assistance: the interest rate should be below market rates or the loan must be provided in a situation when no other international institution can or wants to do it.

There are several conclusions connected to the comparison of Chinese loans and loans provided by the World Bank and Inter-American Development Bank. First, the total amounts of provided loans are similar for all the three providers. There is a jump in 2010 caused by huge projects in Venezuela and Argentina, which were financed by Chinese loans. The level of loans provided by China is not very stable due to the realization of high-value projects, on the other hand the level of IDB's loans is the most stable one.

Second, China aims at only several main sectors compared to the larger focuses of the World Bank and the IDB. The projects in infrastructure, transportation, mining and trade related area are of the highest importance and interest for China. This is caused mainly by the Chinese principle of mutual benefit, which can be reached in these areas. On the other hand, the World Bank and the IDB focuses besides these areas also on a support of health, education, environment and public administration.

Third, Chinese focus in terms of receiving country orientation is also not so diversified. It is obvious that China focuses on such recipients, which are rich on natural resources and have potential for future mutual business cooperation (Venezuela, Brazil, Argentina and Ecuador). The IDB supports much larger group of countries, including Mexico which is one of the most important business partners of USA in the region.

Looking at the issue of providing the (development) loans from any point of view, it is necessary to say, that the Chinese presence in the Latin American region contributes to its economic development. It also gives the Latin American countries the possibility of selection of the financial and business partner which is always good for building a healthy, competitive environment.

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# **SME CONTRIBUTIONS FOR DIVERSIFICATION AND STABILITY IN EMERGING ECONOMIES - AN EMPIRICAL STUDY OF SME SEGMENT IN QATAR ECONOMY**

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## **ABSTRACT**

*Diversity has a significant influence on economic output, productivity and growth (Marra, Carlei & Crociata, 2011, pp438). The contributions from a healthy SME segment towards an economy is vital for sustainability and growth especially in the case of emerging economies as the business composition of an economy is mostly dominated by the SME segment. Similar to most economies in the MENA (Middle Eastern and Africa) region Qatar's economy predominantly depends on natural Gas and Oil industry. This discourages the small and medium entrepreneurs which are the life line of an economy in terms of economic diversity, innovation, employment and leadership.*

**Keywords:** Emerging economies, Qatar, Diversification

## **INTRODUCTION**

Qatar has the highest GDP income per capita in the world and it was estimated to be \$172.9bn in 2012 (QDB, 2013). However the non-oil SME contribution to the GDP was less than 0.5% and more than 50% of the GDP was from the oil and gas industry (QDB, 2013). There are about 11,000 SME's in Qatar and approximately 50% of the SME's do not have an active bank borrowing relationship (QDB, 2013). Qatar is a tax free economy but the regulatory framework of the economy is not sufficiently flexible and transparent. Similar to other GCC economies Qatar has identified the long term consequences of over reliance on oil and gas segments such as unemployment, lack of innovation, lack of diversification, high capital orientation, etc. Also the labor distribution of the economy restricts diversification in the labor force and confines the employment opportunities. Consequently economic policies are being directed towards a more diversified economy.

The primary intention of the research is to identify economic and social contributions of SME segment to the Qatar economy and what challenges curtail these contributions. Also the key role the financial institutions play in the SME segment is investigated to provide solutions to challenges faced by SME entrepreneurs. The research questions centered around profiling SME in Qatar and the contributions of the segment to the overall economic portfolio; looking at SME contribution to Qatar GDP; the challenges faced by SME sector in Qatar; the appropriateness of the present economic, political & International conditions for SME segment in Qatar; the economic consequences of the SME segment failures; the role of financial institutions in supporting the SME segment to overcome challenges; and how to match entrepreneur objectives, government/regulatory and financial market objectives.



## LITERATURE REVIEW

Qatar is an emerging economy in GCC and there are significant differences in economic conditions in Qatar due to cultural background and composition of working force (Dianne and Peter, 2004). Also a consistently applied definition on SME's is important in policy implications, resource allocations and comparisons (Steffen, 2010, p 10). This distinction in SME definitions and economic objectives of countries makes it a unique segment in each economy.

Dependency on a key segment, such as hydrocarbon industry, was highlighted by Martin (2013) '*Were oil supplies everlasting, and the demand for oil strong and continuous, economic diversification would be pointless and the governments of the region would instead need only to ensure the distribution of oil revenues*' (Kubursi 1984 cited in Martin, 2013, p 1). However in reality no resource is everlasting hence over reliance on a single resource causes volatility. Economic diversification mitigates risk by spreading among different segments and promotes innovation and employment opportunities by transfer of knowledge between industries and individuals in industries (Alessandro, Vittorio and Crociata, 2011, p 439). The research on the subject suggested that in majority of economies in the world SME represents 95-99% of businesses (OECD, 2006 cited in Jose, 2013, p.3). This is a clear indication of importance of this segment towards diversification, stability and growth.

Recent research conducted by Varghese (2011) on SME's in GCC and the contributions of the sector on economic diversification and growth suggested that the economic sustainability, diversification and growth primarily depends on the SME segment. Importance of diversification was highlighted by Shamim & AlaaAldin (2012) in their research on the Brunei economy which is highly depended on the oil industry. They observed the current unemployment rate was at 12% in the country due to lack of private sector engagement in industries other than Oil and Gas. Sharma, Garg and Sharma (2011) conducted research, post-recession, to identify the importance of SME segment in an economy and strategies for survival under volatile economic conditions. They suggested lean guidelines – raw materials to output, reduced obsolescence, vendor support and quality, customer loyalty and communication, information sharing and move to higher value added products as strategies for SME's to survive under volatile economic conditions. The dominance of natural gas and oil industry has created an adverse lending pattern in the financial institutions of Qatar and most of the banks are under-lend. Reliance on high capital intensive less risky segments keeps a steady profit line for the banks and the bottom lines are achieved without much effort and risk diversification. However this has a negative impact on the long term economic and social expectations or objectives of the country.

A research conducted by Keasey & McGuinness in 1990 regarding best small and medium companies financing suggested that the efficiency of small and medium businesses increase if they are financed by banks due to control and monitoring procedures of the financial institutions. Also they concluded that cost of funds in external financing is high however the rate of return is equally high if the financing is through external sources particularly banks (Keasey & McGuinness, 1990, pp 220). This specific research finding provides a platform for the research on Qatar economy and SME's due to the financial institutions involvement in the research. According to Oludele and Emilie (2012) "unfavourable foreign rules and regulations, high tariff barriers, inadequate property rights protection, customs administration and restrictive health, safety and technical standards" are some major barriers to internationalization of SME's. They highlighted the adverse impact of rigid regulation on SME segment. This could be related to Qatar economy to some extent as there are weaknesses in law on property rights and high standard requirement on health and safety without concessions or government subsidies for start up's which increases the capital requirement. The study provides empirical evidence that economic policies has a direct impact on this segment and the policy changes during the years after Cameroon independence indicates the economic growth was sustainable after government concentration shifted towards SME's (Olude and Emilie, 2012).

Varghes (2011) argued that regulatory or government support towards SME segment should be empowering or enabling the entrepreneurs rather than providing subsidies or free business support. Smad et al (2012) argued that government funding towards SME segment will go to waste if the segment is not monitored by the government to ensure the funds are put to good use. Lack of access to funds or limited access to

institutional borrowings mitigates SME's from reaching their full potential (Leone & Vento, 2012, pp 11-12). Credit guarantee schemes are a common way of promoting SME access to capital all over the world and a research by Leone & Vento (2012) suggests the existence of credit guarantee schemes would enable banks to lend to SME's with limited information and collateral with less administrative expenses. This would encourage banks towards SME segment lending. Nasr and Rostom (2013) conducted a research on SME contributions in creating dynamic employment opportunities which contributes to the sustainable growth of the economy. They argued that creating employment opportunities and promoting competitiveness in the private sector could ensure sustainable growth in the GCC economies. Pollard, D & Simberova, I (2009) conducted a research on ASEAN (Association of Southeast Asian Nations) region to understand the technological influence on SME's and how it can be used to enhance the performance of this segment. They identified some key challenges to the segment in this region with a special emphasis on industrialization "Such as infrastructure bottlenecks, lack of development of supporting industries and an absence of relevant institutions and policies. Furthermore, a major barrier to economic expansion is a lack of human resource development and skills shortfalls (Yamazawa, 1994 cited in David & Iveta, 2009). In conclusion they proposed government aid should be to promote efficient and competitive SMEs rather than pure price base competition.

The general regulatory issue with GCC countries is the absence of specific segment law. The policies and regulation in GCC is more generic rather than providing a specific segment orientation (Varghes, 2011). Varghes argued that regulatory or government support towards SME segment should be empowering or enabling the entrepreneurs rather than providing subsidies or free business support. This would ensure sustainability and competitiveness in the industry and growth.

## METHODOLOGY

A triangular methodology consisting of interviews, questionnaires and secondary data was deployed for this investigation. Interviews were conducted with 9 financial representatives in the SME segment of Qatar. A Questionnaire containing 28 questions under 4 sections was distributed among 75 selected SME's from different segments and 44 successful questionnaires were received during the 1 month period of the research. Several participants were reluctant to disclose personal information as regulatory barriers exist in the segment and this lack of willingness to disclosure is common in this part of the world and as described by Dianne & Peter (2006) "research on SME's in this region is not frequent nor available to non-natives".

## RESULTS

### Secondary data analysis

One of the major challenges for this investigation was the absence of a clear definition for the SME segment in Qatar. This is a common issue for the GCC countries and as per Varghese (2011) SME segment was neglected in this region due to the over reliance of natural gas and oil segment. A GDP composition analysis of Qatar forms the basis for the research and the research findings are defined on the theory that "Economic diversification promotes sustainable growth of an economy and reduces overall failure of an economy due to a failure of one segment". The GCC countries GDP composition is dominated by Natural oil and gas segment with an average percentage of 65% and the major contributors in the developed and emerging economies is services segment being 72% (CIA, 2012). The services industry in the developed countries consists of various sub-sectors and this diversifies the services segment. Nase & Rostom's (2013) research based on the World Bank survey data suggested lack of diversification in GCC region is the main constrain for sustainable growth of an economy. According to world bank statistics as of 2012 SME segment contributes 39% to total GDP and 30% to 55% of employment in developing countries (Gohary, 2012).

This suggests that the present economic conditions in Qatar do not necessarily focus or support SME segment as the focus is entirely on hydro carbon industry however the future for SMEs in Qatar looks bright and the Qatar government's vision 2030 emphasises the importance of SME contributions to the economy. Under the economic development pillar of Qatar vision 2030 government signifies the contributions of private sector involvement in economic diversification to reduce the dependency on hydrocarbon industry. "A diversified

economy that gradually reduces its dependence on hydrocarbon industries, enhances the role of the private sector and maintains its competitiveness” (GSDP, 2013). These government directives promote SME segment in Qatar in terms of availability of finance through Al-dhameen program (Credit guarantee program of Qatar development Bank), Infrastructure development through new proposed industrial area and education to young Qatari entrepreneurs. However the underlying issues of SME segment and reluctance of Qatari young generation to get into business should be studied more in depth to realize the government objectives. Based on an analysis on key financial institutions in Qatar it is observed that despite government initiatives to promote lending to SME segment the overall financing to SME's in Qatar remains at a significantly lower level. The analysis further suggested that the major financial institutions do not recognize the SME segment as a distinctive business segment within their financial statements. The financials of QNB (Qatar National Bank) shows a total of 5% against total bank's lending to SME segment which is significantly low compared to a market where SME's comprises of 90% of the total businesses.

Based on the above analysis of data it could be summarized that the present economic conditions of Qatar are not focused on SME segment however government has identified the importance of SME segment with regards to diversification and growth of the economy. The regulatory framework presently does not identify SMEs distinctively but several government initiatives are in place to change the existing unfavourable conditions.

## **Survey findings**

### **Benefits and barriers**

Section 2 of the questionnaire explored the opportunities/benefits & challenges of operating in Qatar market as a SME. 95% (32 participants) of the entrepreneurs highlighted Taxation as the major benefit in operating in Qatar as their 1<sup>st</sup> choice and 45% (20 participants) selected business opportunities as their 2<sup>nd</sup> for major benefits of operating in Qatar. 27% (12 participants) of the participants selected availability of labour as their 2<sup>nd</sup> choice for major benefits in operating in Qatar. Availability of Government support and regulation was identified as a benefit by only 2% of the participants. The least preferred benefit was capital availability. The information availability and cost of information was also included in this section and 68% of the participants suggested that the level of information availability is from Moderate to high levels and 100% of participants (25 participants – High and 19 participants – Reasonable) suggested the cost of information is reasonable to high in Qatar market. Most entrepreneurs were reluctant to provide details on other benefits. However some suggested that good supply chain, Demand for innovative and high tech. Products, Clients with high purchasing power, relaxed labour rules and manageable & established relationships with customers.

20% of the entrepreneur's denoted access to capital/availability of finance as their major challenge as their second choice and 57% indicated competition from large companies as their major constrain. Almost all the entrepreneurs (98%) agreed that these challenges have a medium to high impact on their operations. The most interesting finding of this questionnaire was that 60% of SME entrepreneurs either did not know or was not utilizing the government initiatives to overcome these constrains. Some entrepreneurs identified logistical barriers, socio-cultural barriers and Lack of government incentives for trading segment as other challenges faced by SME's in Qatar.

### **Financing and Financial Institutions**

Access to capital and credit conditions applied by financial institutions appears to be one of the critical constrain for the growth of SME segment. 79% of owners declared that they have an active relationship with a financial institution however a general finding was that the relationship was on the individuals name instead of the company name. Out of the sample of 44 entrepreneurs 21% said they do not have active relationship with a bank. 54% of contributors to the survey said that the products and services offered by the financial services are good to excellent and 34% said it needs improvements.

Based on the findings the top 2 challenges are Collateral requirements of the banks and Interest rates on facilities. Other challenges of significance are lack of data on businesses and repayment structures. Some

entrepreneurs highlighted that following changes should be done in the banking or financial institutions lending policies: Promote borrow based Lending Policies; Flexibility in Collateral requirements (Tangible and Intangible collaterals); Guidance and support in Financing; Improvements in TAT (Turn Around Time); Concessionary Interest Rates; Product range (Availability of Trade Finance Products); Relaxed Documentation; Finance future operations rather than current operations (Growth aspect); Loans for start-ups without banking history. Due to the uniqueness of companies and exclusive nature of the segment a large number of participants suggested the bank lending's should be personalized to suit their working capital requirements and receivable structures.

## **Generic Issues**

The expected business growth and entrepreneur expectations to facilitate this expected growth was also discussed and as per the survey findings 66% of the entrepreneurs expected a growth of 6% or above for the coming two years. 93% of the entrepreneurs mentioned the most critical element they require to facilitate this growth is financing and as per the survey findings the other important factor that facilitates growth was support and advice from Financial Institutions (FI's) and government. The expected business growth and expectations of business owners regarding the external capital sourcing are interesting. According to entrepreneurs participating in the survey 55% expected an average growth of 5% for their business operations within the next 2 years and an average 5% raise in employees. As per the findings the top two expectations of the entrepreneurs are documentation (Security structure, process and documents) and interest rates.

## **Discussion**

The questionnaire findings suggested that SMEs operating in Qatar are focused on few key segments such as trading and contracting and this lack of diversity mitigates employment opportunities and innovation in the economy which has a direct impact on the sustainability of the economy. As per research findings of Alessandro, Vittorio and Crociata (2011) diversification mitigates risk of economic failure by reducing the reliance of single or few key industries. Creating jobs by developing SME segment would enable sustainability and economic growth. According to Elasrag SME segment provides 40% to 80% of job opportunities in an economy (Elasrag cited in Pedrosa-Garcia, 2013). Out of the sample businesses 73% are operating in Qatar Metropolitan area and businesses operating in remote areas are almost negligible. This is a critical factor considering the geographical diversification. The spread of business across all regions is important and as per a study conducted by Alessandro, Vittorio & Alessandro (2011) on Italian SMEs suggesting geographical distributions of SMEs is vital for cities to evolve and develop.

According to the entrepreneurs in the survey there are several benefits for SMEs operating in Qatar. Taxation is one of the key benefits operating in Qatar 73% of the sample agreed and chose taxation as the major benefit. However this could be a major constrain in obtaining finance. Due to no taxation, the accounting and financial reports of SME's are not prepared in proper formats which discourage financial institutions in lending to this segment. The reliability of financials is questionable and that is a major discouraging factor for lending institutions. A dedicated government institution on SMEs encourages and focuses on issues of SMEs in Qatar in terms of financing and support services. Government initiatives to introduce a dedicated SME bank (Qatar Development Bank) is also another benefit for SMEs operating in Qatar however further discussion on QDB operations would be discussed in the latter part of the paper.

As per the research finding the two critical challenges are Access to capital and competition from large businesses. Access to capital is the mostly discussed SME constrain in the global economy and as per Pedrosa-Garcia, 2013 MENA (Middle Eastern & North Africa) region has the highest rate of credit proposal rejections and lowest in maintaining a banking relationship. A research conducted by Keasey & McGuinness in 1990 suggested deploying personal funds would reduce the rate of return compared external financing (especially banks) due to lack of control and monitoring. Hence the critical constrain of access to capital should be mitigated by encouraging banking sector to actively participate in the SME lending process. The survey suggested entrepreneurs in Qatar expect Finance for their growth projections and also Advisory services are denoted as one of the critical requirement of entrepreneurs. According to the research outcomes of Jose (2013) lack of finance, business strategies and HR capital are the main constrains for the MENA region. This validates the present

research outcomes on Qatar as the majority of entrepreneurs and interviewees denoted the same constraints as critical elements and some unique conditions relevant to Qatar.

The critical findings of the questionnaire are summarized as follows: Taxation and business potentials are major benefits operating in Qatar; There are few critical barriers to segment (Access to finance, Regulation, HR capital & competition from large companies); SMEs operating in Qatar are concentrated in the city area; the SMEs are local oriented and internationalization is an issue; The government initiatives lack practicality (Documentation and procedure) and reach; the financial institutions are distant from the segment and landings are mostly under personal names meaning internal financing and business does not have relationship with the institution; inefficiencies in finance management due to lack of control and monitoring from external experts such as banks; the focus of government regarding SMEs restricted to natives and this hinders innovation and competition in the market; infrastructure needs development.

## **Interview Findings**

Structured interviews were conducted with 9 financial representatives in the SME segment of Qatar. Each interview was segregated around 5 different sections: Contributions of SME segment to Qatar economy; Benefits and Barriers to the segment; Role of Financial Institutions; Role of Regulation/Government; General views on the segment.

### **Contributions of SME segment to Qatar economy**

All the interviewees agreed and confirmed the importance of the SME segment in Qatar's economy and explicitly expressed their opinion on the contributions made by the segment towards diversification and growth. According to FIRs (Financial Institutions Representatives) the contributions of SME segment was low in comparison to the size of the economy and restricted to few key segments such as trading, sub-contracting and retail outlets. However the present position could be improved through developments in IT segment, Education and government intervention. FIRs suggested improvements in education, tourism, and manufacturing segments in order to diversify the economy to promote sustainable growth.

### **Benefits and Barriers to the segment**

The barriers and benefits are from a financial institutions perspective and this helps to reconcile the conflict of interest between entrepreneurs and financial institutions in financing. FIRs highlighted business opportunities, government support and taxation as major benefits in operating in Qatar. Restricted access to finance, competition from large companies, Lack of knowhow and lack of entrepreneurial skills were denoted as the major barriers to SME segment.

### **Role of Financial Institutions**

The existing research on SMEs all over the world confirms that the most critical challenge SMEs face mostly at start-up stage is the access to finance. Debt capital extraction through the financial system continues to be the major barrier for this segment in the Qatari economy as well. Collaborative contributions of FIRs, Active participation in credit guarantee schemes and working closely with entrepreneurs are identified as major roles of FIRs to develop SME segment.

### **Role of Regulation/Government**

Regulation and governments play a vital role in developing of the SME segment. The heavy risk associated with this segment makes it vulnerable to credit rejections by FIRs. A direct involvement of government is required to mitigate credit risk of SMEs by compensating FIRs for a greater economic cause. As per FIRs transparency in regulation and distinct SME regulation was expected by stakeholders and the general role of SME regulation should be guidance oriented than a pure regulatory role.

## **Discussion**

Most of the FIRs agreed that Qatar has a healthy economic and social environment for SMEs to grow however they were not satisfied with the present conditions and they felt the resources are underutilized. FIRs strongly commended the Qatar government initiatives by setting up dedicated institutions to manage equity financing of

SMEs in Qatar. However their general opinion was that financial institutions, who are participants of this lending program, are not motivated enough to actively participate in the program. The heavy documentation needed, extended lead times, higher administrative costs and the thin margins offered is a major turn off for the banks. Despite government efforts in the MENA and GCC the SME lending's remains at a very low status. As per the study conducted by Roberto et al (2011) the total SME lending from banks in the MENA region is at 8% and the GCC lending's are even lower at 2%. Al-dhameen credit guarantee scheme may not be the only answer to financing issues of SMEs in fact this may have adverse impact on the economy. Credit guarantee schemes may create artificial interest reductions in the segment and they may support survival of unprofitable unwanted businesses or industries (Hallberg, 1999 cited in Leone & Vento, 2012).

Qatar economy does not suffer from tangible resource deficiencies however it lacks intangible resources such as talent and human capital. As per most of the FIRs responses, education and motivation were critical barriers to the SME segment in Qatar. This financial advisory function should be facilitated by financial institutions of Qatar rather than a single dedicated government institution. According to Yesseleva (2013) SMEs rely more on accountants and financial institutions advice rather than government institutions. The government role should be motivating financial institutions by rewarding or incentivizing the participating institutions.

Availability of market information is another vital challenge in the Qatar market. The knowledge spillovers and discussion forums within industries are rare in the market and government should promote this to develop the segment by creating competitiveness. This scarcity of information is considered as one of the major barrier for lending to SMEs by several FIRs. Presently financial institutions contributions towards SME segment is significantly low in Qatar and the key reasons identified in the research through the interviews were lack of information/knowledge of the company, management incompetence, collaterals, less returns and high risk and high administrative costs.

Apart from the above generic financial barriers to the segment there are some unique conditions applicable to Qatar SME's such as local ownership (51% of the SME should be owned by a Qatari), lack of entrepreneurship, interest on government employment over business formation, no clear definition for SME segment, no distinct regulation for SME segment and personal guarantees of partners (regulatory requirement) discouraging new entrants or expansion by accessing capital.

As mentioned by one of the FIRs the regulation in Qatar does not distinctively handle SMEs. The first and most important step as mentioned by several FIRs would be to define the segment and implement a separate set of regulation to the defined segment. Regulation should create an enabling environment for SMEs to grow (Akinboade and Kinfack, 2012). Several FIRs commented that Qatar regulation lacks transparency and communication.

Casagrande & Spallone (2006) conducted a research on SME development banks and suggested the setup of SME development banks through public financial operations is to mitigate the information asymmetries which curtail the lending to SMEs through conventional commercial banks. In Qatar, the QDB (Qatar Development Bank) was setup by government to support capital financing of SMEs but QDB operates through conventional banking system in the country and no clear distinct requirements or procedures are taken by QDB to bridge the information asymmetries between the SMEs and participating banks.

## CONCLUSIONS

There are several key challenges faced by this segment in Qatar economy and these challenges are common across most of the global economies. However there are several unique constraints to SMEs operating in Qatar adequate consideration should be given to these unique conditions to ensure practicality of recommendations.

- Financing is a major barrier to SME segment and this is due to several reasons such as high interest rates, lack of collateral availability, no business history or proven records, non-availability of financial analysis and data on the companies, high administrative costs of funds and high risk associated with the segment due to high risk of failure.
- The young generation of Qatar lacks the enthusiasm to start businesses (Lack of entrepreneurship).

- Availability of market information and clear definition of the segment to promote focus and concentration is also required to develop the segment.
- The existing dedicated SME financial institution of Qatar is Qatar development banks' (QDB) process and procedures do not entirely support the SME segment of the economy.
- Most of SMEs operating in Qatar are focused in the city and suburbs. Also the SMEs lack knowledge and support to move to international markets.

## IMPLICATIONS & RECOMMENDATIONS

The conclusions of the research indicate several vital practical implications for different stakeholders of the SME segment in Qatar such access to Capital/Finance, absence of clear definition for SMEs in Qatar and regulation, lack of advisory functions by government and financial institutions and overcome competition from large companies including multinational companies. Recommendations for different stakeholders are as follows.

Government & regulatory authorities	Entrepreneurs	Financial institutions
Clear distinction of regulation	Promote knowledge spillovers	Grow with the business by funding future operations than just current working capital requirements
SME Funds and changes to the current credit guarantee program	Record keeping and competent knowledge	
Priority for SMEs in state sponsored projects		Improvements to Advisory function
Develop entrepreneurs by discouraging government jobs for Qatari population		

## Future research

This research was conducted based on a limited sample from pre-selected SMEs and financial institutional representatives to observe the contributions of SME segment to the Qatar economy and challenges faced by the segment with a significant emphasis given the access to finance as a major barrier. Further research should be conducted on other barriers affecting this segment such as regulation, multi-cultural composition of population and language. Future research should involve government institutions set up to manage SMEs in Qatar.

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# **THE RELATION BETWEEN QUALITY MANAGEMENT AND INNOVATION PERFORMANCE IN THE TEXTILE SECTOR IN PORTUGAL**

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## **ABSTRACT**

*Quality Management practices are increasingly becoming precursors for better Performance in a company, but how does this effect takes place is not yet well established in the literature and some controversy still prevails. Is there any role for Innovation in the relation between Quality Management and Performance? Furthermore, how do these different concepts interact within the textile industry in Portugal? These are questions that the current literature does not yet address consensually given that there is still no research pertaining to these different concepts, within the textile sector. The current study is divided into two distinct parts. The first part is more theoretical where various concepts and practices are reviewed at the level of Quality Management, Innovation and Performance, equally making reference to the textile sector in Portugal and its evolution over time. We investigate the relation between the three concepts aforementioned in the context of the textile sector, through a questionnaire, based on different assessment levels. The study and the respective data analysis was based on the responses obtained from a total of 66 questionnaires, sent via e-mail to ATP certified Portuguese companies in the textile sector and completed online. The results reveal that there is a direct relationship between Quality Management and Innovation and Innovation and Performance. However, regarding Quality Management and Performance, rather than a direct relationship, there seems to exist an indirect relationship. Thus, in this study, Innovation appears as a mediator between Quality Management and Performance. Therefore, an organization should have a set of good practices in terms of Quality Management, and whenever possible, promote Innovation as the differentiating factor in order to increase competitiveness so as to obtain good results in Organizational Performance.*

**Keywords:** Quality Management, Performance, Innovation, Companies in the Textile Sector, Portugal

## **INTRODUCTION**

Quality Management, Innovation and Performance have been thoroughly studied, nevertheless there are not many studies that address all these three issues jointly. Our research tries to follow this novel path, allowing attempting to relate these concepts in order to facilitate a deeper understanding of this complex relation between all these variables. The drive for quality is an ongoing challenge for managers and how they organize the activities of the company, so they can meet their real intentions and expectations of their customers. Quality management allow companies to have competitive advantages over their competitors.

Based on the concepts of Quality management, innovation and performance it was our purpose to realize the extent to which these factors are connected and how they influence the turnover of Portuguese textile sector companies. The textile sector, specifically the clothing industry, is undergoing a period of restructuring that lead to the elimination of thousands of jobs. With the end trade barriers for Chinese companies, strong competitive pressure created by economies of cheap labor, required several changes. Portugal to a new

competitive capacity and flexibility both with respect to products and the production processes and management structures.

The main objectives of this research are to verify: What is the relationship between Quality Management, Innovation and Performance? ; What is the relationship between these two dimensions (Quality and Performance) and the level of innovation? Are there mediating variables in this relation?

## **QUALITY MANAGEMENT AND INNOVATION**

### **TQM**

In 1956, Armand Feigenbaum introduced the concept of Total Quality Control (TQC) that was defined as an effective system for integrating the efforts of developing, maintaining and improving quality to allow the marketing, engineering, production and service reach complete customer satisfaction. His work was the starting point for the Standards of Quality Assurance System, which later, in the 1980s, led to the international standards ISO 9000 (International Organization for Standardization, 1987) based in Geneva (Santos, 2010). This concept was also the foundation of Total Quality Management (TQM) and Quality Management fields.

Nevertheless, there is no clear definition of TQM. According to Miller (1996) TQM, is a progressive process through which management takes all necessary steps to allow any member of the organization in carrying out its activities, it is responsible for compliance with standards and to meet or exceed the needs of its internal and external customers. According to Zehir C. et al. (2012), the TQM is a holistic approach to quality improvement for businesses in order to improve performance in terms of quality and also innovation.

The benefits of using TQM in management are very relevant. These practices can lead to improved operational efficiency, optimized resources, reduced costs and increased employee motivation. While being on one of the tools with greater impact on turnover, TQM is also one of the most difficult tools to implement effectively. Its main philosophy is that organizations acquire strengths by satisfying the needs of their customers (Zehir et al., 2012). According to Long R. (1996), TQM values the human beings within organizations, recognizing their ability to solve problems on the spot when they occur, and implements an enduring search for perfection. It uses a variety of analytical techniques and management tools to analyze processes, performance and supply chain logistics. Thus, the general principles of Total Quality are: Customer Focus; Quality first; Improvement of products and processes; Involvement, commitment and human resource development.

### **Innovation**

The importance of innovation has been growing, with several research centres and projects being created over the last two decades, especially in Europe and Asia (Fagerberg, 2004). However, innovation in the context of socio-economic development is not something new, in fact, as Fagerberg et al. (2003) state, innovation is as old as humanity even if the study of innovation as a phenomenon per se did not exist until very recently. Although Schumpeter (1934) referred to innovation as something central to the process of economic development, as something that drives growth cycles, the truth is that only in the 1960s did studies of innovation begin to emerge as an independent field (Fagerberg and Verspagen, 2002).

The Frascati Manual (dedicated to the measurement of R&D activities with its first version published in the 1960s) (OECD, 1994) and the Oslo Manual (dedicated to the measurement and interpretation of innovation - published for the first time in 1992 and re-published in 1997 and 2005) (OECD, 2005) provide some answers for the definition of innovation. Both manuals distinguish between innovation activities and innovation itself. Innovation refers to products (goods or services) and processes new or significantly improved that are introduced to the market (the "new" parameter indicates that they at least have to be new to your business although the concept is usually expanded geographically to mean new to the region, to the country or to the world).

### **TQM and Innovation**

With the rise of the use of the concepts of Quality and Innovation, there have been more studies that seek to verify the relationship between Quality and Innovation. Prajogo and Sohal (2001), after an extensive review of the literature, concluded that the relationship between TQM and innovation is equally complex and ambiguous.

Some scholars argue that there is a positive link between total quality and innovation, while others emphasize that there is a negative relationship. According to Zehir et al., (2012), the main reason for the inconsistent findings that exist in the literature, is related to the multidimensional nature of both the quality of both the Innovation. The arguments in favor of a positive relationship between the Total Management and Innovation in Quality are that customer orientation, leadership, continuous improvement and also speed to market that are important quality drivers that are also significant to the success of innovation (Flynn, 1994).

The theoretical arguments about the relationship between TQM and Innovation can be made at two levels of analysis: First, considering that quality and specifically TQM, creates an environment conducive to Innovation and Development, and secondly, showing that many of the determinants of innovation are affected by some dimensions of TQM.

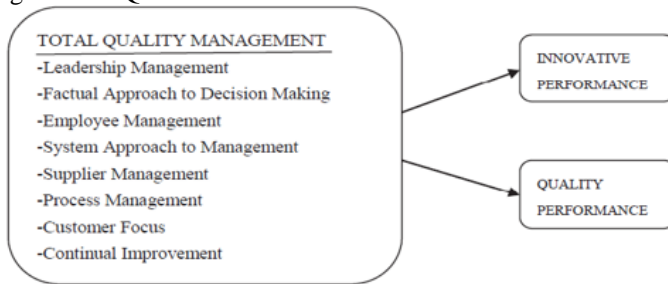
Market orientation, one of TQM principles, allows strategic alignment between market and technology, permitting new responses to consumer demands. Thus, the practices of TQM associated with this guiding principle promote learning and innovation in business processes, allowing the promotion of innovative ideas to market. Know-how enables innovation because it improves practices and makes possible to formulate more pertinent questions about the need for change and call for creativity. Thus, continuous improvement associated with its practices, helps to promote critical thinking about the companies know-how and thus induce innovation. Teamwork, can also have positive effects on innovation, fostering communication and information flows, which are needed in the formulation of Innovation projects. Moreover, TQM practices argue that a greater capacity of the workforce allows greater degrees of autonomy and hence greater capacity for innovation.

There are also arguments that reject the existence of a positive relationship between TQM and innovation. These can be summarized in two aspects: Firstly, it may be assumed that quality and innovation arise from alternative competing priorities and consequently its management, achievement and performance are conflicting and often can substitute each other, rather than complementary. Secondly, it is assumed that a strict market orientation could have negative effects on innovation and performance (companies that only answer to present needs fail to innovate to the future). Also, centering only on the client/consumer, catering to his needs and their individual characteristics and the anxiety of having to control all processes can be reflected in the loss of autonomy of workers and delaying the development of the innovation itself. Some scholars argue that the negative relationship between TQM and innovation stems from the fact due to the implementation of respective standards creativity can be hindered (Zehir et. al., 2012).

It is known that the promotion of innovation is considered to be a cornerstone of business competitiveness (Daft and Becker, 1978). From the standpoint of intangible resources that positively affect innovation, most are promoted by TQM, taking into account the inherent features of human resources, organizational, business and knowledge management resources as a source of innovative ideas. Thus, innovation is positively affected if the company undertakes a TQM program. Studies conducted by (Perdomo - Ortiz, J. et al., 2005), indicate that there is a relationship between the practices of TQM and Innovation, and the principle of continuous improvement enhances the essential elements of an innovation-driven organization and the practices associated with human resource management help to promote information and knowledge flows, that lead to innovation. According to this perspective it was found that teamwork, preparation of all people to the issues of quality, the existence of a system of incentives for a job well done and selecting people according to characteristics of each job mean lead to innovation best practices as well to a greater focus on quality according to the requirements of customers. However, among all dimensions of TQM that are related to innovation, there are three of them stand out among the various studies cited above: Process management; Product development; Human resource management.

Companies that are based on the principles of continuous improvement and consumer orientation, and utilize team work, are more prone to develop the innovation. Quality practices in business are a precursor to the accumulation of innovation capability and hence innovative practices and their routines are associated with the know-how resulting from Quality Management.

Figure 1 – TQM an Innovation



Source: Perdomo–Ortiz et al. (2005)

In addition, the study conducted by Zehir, C. et al., (2012) indicates that there is a positive relationship between the leadership process management, continuous improvement and customer focus and Innovative Performance. Again, according to this perspective, it seems that there is a positive relationship between TQM and Innovation.

## Performance, Innovation and TQM

It is generally accepted that companies with a greater propensity for innovation usually have better performance, because they have more conditions to be successful in responding to the environment, and develop new capabilities that lead to competitive advantage and consequently the high performers to other competitors. He and Nie (2008) state that innovation is the most important variable in determining the performance of companies. Without innovation, companies run the risk of simply losing their competitiveness because they knew not respond to what the market dynamics constantly imposes. According to Milan (1997), the impact of the Innovation on performance is not always clear in the short term, therefore long-term impacts, such as economic and social benefits associated with innovation do not arise before innovation diffusion. In general, the studies that have been done show that firms with a culture of innovation have higher profits and have a faster growth than other companies.

Several authors conclude that the implementation of a Quality system makes the company to adopt a set of tools, which ultimately have a key role in the success TQM implementation and in performance (Boiral and Roy, 2007). A study by Kassinis and Soteriou (2003) show that there is a positive relationship between the adoption of quality management practices and performance, the level of services, and that these gains have repercussions on cost reduction, economy of resources, opportunity for innovation, customer retention and loyalty and motivation of employees. Quality Management received a high degree of attention in the literature because several studies indicate that greater performance is related with this system of Quality Management (Nair, 2006).

## EMPIRICAL ANALYSIS

The research model presented reflects the analysis of the influence of TQM on Innovation and the influence of TQM/ innovation on organizational performance.

We seek to study this on the Portuguese textile sector. Currently the textile industry as a whole generates a turnover of 6,267 million Euro business (3.5% of European value) with about 7,000 companies laboring in all subsectors of the textile and clothing industry although most of these are small and medium enterprises. This industry represents: 10% - Total of Portuguese exports; 19% - Jobs in Manufacturing Industry; 8% - Turnover of Manufacturing Industry; 8% - Production Manufacturing Industry.

## Sample and data collection procedure

We test our hypotheses by conducting a survey in the context of a single sector. The analysis of a single sector may be appropriate for evaluating innovation performance, since some of the knowledge base and practices

involved in innovation processes are likely to be homogeneous (Santarelli and Piergiovanni, 1996). Choosing one sector to focus our data collection decreases the range of unimportant variations.

The data was collected in 2013 through an online questionnaire. This method is preferable to the physical collection of data in terms of speed and cost (Wright, 2005) and also allows respondents to spend less time completing the questionnaire (although it doesn't allow the control of the respondents). Three pre-tests were made with companies belonging to textile sector in the region of Leiria. Before the beginning of our empirical study, ie before sending questionnaires by email, we previously contacted the ATP (Association of Textile Portugal), which provided the list of their associates. Our sample consists of 66 valid responses (from universe of 500 companies). Due to the size and characteristics of the sample (a non-probabilistic convenience sample) the findings of this study cannot be generalized.

## **MEASUREMENT OF VARIABLES**

### **TQM**

This study selected the TQM scale used by Lai, K. (2003). This scale was developed from the scale resulting from the research conducted by Black and Porter (1996), whose purpose, according to the authors, was to empirically validate the model of self-evaluation of the Total Quality Management system used for Malcolm Baldrige award. Specifically, 39 items grouped into 10 dimensions or critical factors, which concluded to be reliable and valid (Santos, J. 2010) were identified. In our study, we simplified the scale for 8 dimensions (People management and customers (4 items), Communication and improving information (4), management interface with the outside (3), Strategic Quality Management (7), Organizational Structure for improvement (2) Operating Plan Quality (3), Evaluation systems of quality improvement (4), Culture for the quality (2)).

### **Innovation**

Following Perdomo-Ortiz., et. al. (2005) and Gupta (2012) we used 9 items to measure innovation (Continuous improvement of service products, Replacement of old products by new and innovative, Development of green products, Investing in services and innovative solutions, Measures to improve and change, Creativity, Funding for innovation, Clear strategies for innovation, Active involvement of employees in innovation strategies).

### **Performance**

There are different methods to measure organizational performance, from essentially financial models to more subjective ones taking into account different stakeholders. Sharma et. al., (1997) report that we should use several dimensions or indicators of financial nature but also indicators of non- financial nature. These are more qualitative in nature and ensure that strategic objectives and other prospects for stability and continuity of the business should be a concern when defining a system of benchmarking. To measure organizational performance, we followed Allred, et al. (2011), adopting a model that assesses the performance of organizations using a number of items, measured through qualitative answers (Industry Leadership, Income from sales, Turnover, Profit margins, Growth in sales volume, Profit growth of sales, Growth in market share, Getting new customers, Increase sales to existing customers).

### **Control Variables**

The size and business level were the control variables considered in this study. Firm size was measured by number of employees and business level was defined by turnover. It is argued that larger firms who may have access to scarce resources (Narver and Slater, 1990), may be more likely to develop innovations than smaller companies (Kyrgidou and Spyropoulou 2012).

### **Validity**

According to test results, we had a good level of reliability and internal consistency, demonstrating the existence of a good correlation between homogeneity and validity in the questionnaire. There is a good correlation between questions and answers, verifying that there is good internal consistency for all scales used. After the reliability and validity scales have been determined, there was the validity of the dimensions, using a method of reducing the size of the data. All scales were retained and assessed by Cronbach's alpha. Analyzing the percentage of variance it appears that all the retained components explain more than 50 % of the total variance of the original variables. The results of the principal component factor analysis showed that all items had a significant loading on the corresponding factor ( $> 0.50$ ) and the proportion of variance explained by each factor is significant (Table 1). Accordingly, we chose to keep all the items of the scale and it appears that there is a strong relationship between each item and the new components.

## Structural Model

Subsequently we used a structural equation model, and used as latent variables the target variables of this study, i.e., Quality Management, Innovation and Performance, while the manifest variables were the questions in the questionnaire. We tested the following initial model:

**Table 1 – CATPCA analysis**

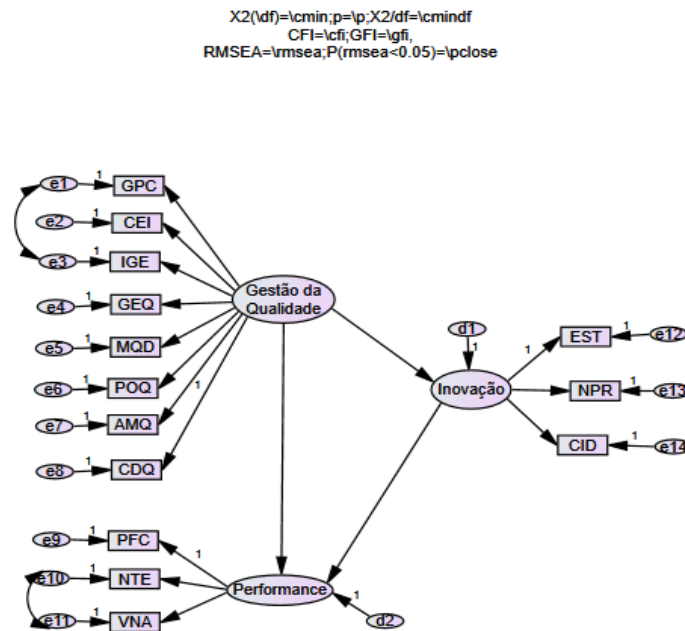
Componente	Alfa de Cronbach			Component Loadings	
		Valor próprio	% Variância	Item	Componente
A – Gestão de Pessoas e Clientes	0,921	2,592	86,406	1.1	0,944
				1.2	0,970
				1.3	0,872
B- Comunicação e melhoria de informação	0,862	2,351	78,364	2.1	0,942
				2.2	0,953
				2.3	0,746
C – Interface de Gestão com o exterior	0,925	2,608	86,945	3.1	0,986
				3.2	0,890
				3.3	0,916
D – Gestão Estratégica da Qualidade	0,901	3,580	71,609	4.1	0,813
				4.2	0,851
				4.3	0,834
				4.4	0,873
				4.5	0,859
E – Estrutura organizacional para a melhoria da qualidade entre departamentos	0,79	1,653	82,636	5.1	0,909
				5.2	0,909
F – Plano Operacional da Qualidade	0,981	2,890	96,319	6.1	0,989
				6.2	0,990
				6.3	0,965
G- Sistema de avaliação da melhoria da Qualidade	0,931	3,311	82,787	7.1	0,899
				7.2	0,945
				7.3	0,907
				7.4	0,888
H – Cultura para a Qualidade	0,784	1,645	82,234	8.1	0,907
				8.2	0,907
I – Performance – Capacidade de alcançar os objetivos da empresa.	0,927	5,692	63,247	9.3.1	0,670
				9.3.2	0,848
				9.3.3	0,829
				9.3.4	0,761
				9.3.5	0,863
				9.3.6	0,901
				9.3.7	0,792
				9.3.8	0,596
				9.3.9	0,848
J – Inovação – Autoavaliação da empresa sobre o seu grau de inovação.	0,94	6,093	67,705	10.1	0,773
				10.2	0,775
				10.3	0,756
				10.4	0,893
				10.5	0,871
				10.6	0,862
				10.7	0,772
				10.8	0,869
				10.9	0,841

After checking and adjusting of the respective model, it appears that this is a quality model that is statistically well-adjusted and with good results (CFI – 0.961 and TLI 0.951). Through analysis of the p\_value of the

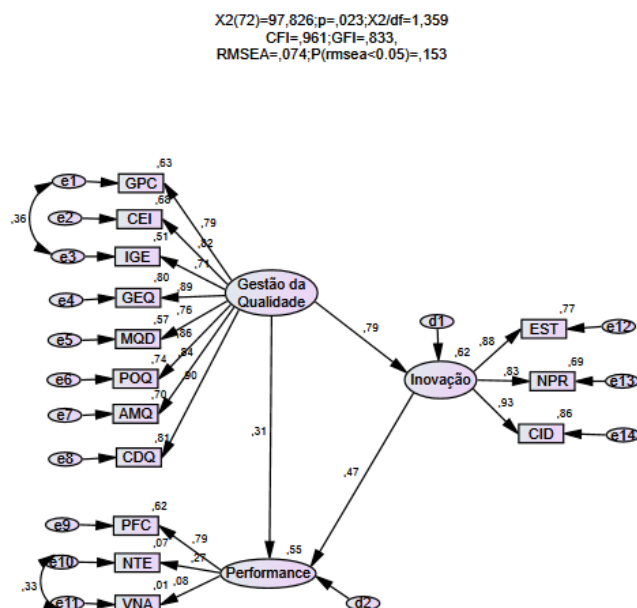
estimates of the Model Fit Output we found that there is a direct relationship between Quality Management and Innovation between Innovation and Performance. However, it was found that there is a direct relationship between Quality Management and Performance.

Regarding the model with standardized variables we verify that there is a relationship between all variables. However, there is only a slight influence of Quality Management for Performance with the value  $\beta = 0.31$ , while the influence of Quality Management in Innovation is much higher than with  $\beta = 0.79$  (and statistically significant), and Innovation in Performance with  $\beta = 0.47$ . These results indicate that innovation has more direct influence on the performance of the Quality Management, and it ends up working as a mediating variable between Quality Management and Performance. However, only the relation between Innovation and Performance was statistically significant at 5%. The control variables turnover were not significant.

**Figure 2 – Structural Model**



**Figure 3 – Structural Model Fit and Estimates Output**



Later by using the Bootstrap test that aims to verify the indirect effects of a particular variable, it was also demonstrated that the innovation variable works as a mediator, mediating the relation between Quality Management and Performance. Thus, innovation has a direct impact on performance and mediates the relation between Quality Management and Performance.

**Figure 4 -**

Indirect Effects - Two Tailed Significance (PC) (Group number 1 - Default model)

	Qualidade	Inovação	Performance
Inovação	...	...	...
Performance	.025	...	...
CID	.010	...	...
Novos_Produtos	.010	...	...
Estratégia	.010	...	...
PFC	.011	.026	...
@9.1Atualmentequalonúmerodetrabalhadorenaempresa	.057	.064	...
@9.2Qualovolumedenegócio poranoemEuros	.656	.648	...
Gestaopessoaseclientes	...	...	...
Comunicacaoeinformacao	...	...	...
Interfacedegestãoexterior	...	...	...
Gestãoestrategicaqualidade	...	...	...
Qualidadedepartamentos	...	...	...
Planooperacionalqualidade	...	...	...
Avaliacaoqualidade	...	...	...
Culturaqualidade	...	...	...

## CONCLUSIONS

Any organization must know how to control their product and service life cycle to ensure that in the end the organization will achieve the desired quality. Quality management should be a part of a subsystem of the overall management system and included in development strategies. Nevertheless, Quality Management is not a magic wand that has the miraculous solution to all for all problems (Dantas and Coelho, 2007). According to Alegre et al. (2011) the fact of having an efficient quality management practice, by itself is not enough to achieve a better Organizational Performance. As we demonstrated in our study, Quality Management is a contributing factor for Innovation that will enable better organizational performance. The performance of new products depends largely on the company's ability to make good use of market information to understand what consumers want and, subsequently, their ability to implement the right strategies to achieve these expectations (Rodrigues, 2008) and in that sense, a good quality management becomes an essential tool in this process. In our study, Quality Management is not primarily a factor of direct impact on performance, but rather something that contributes to the introduction of new products, and especially processes that improve performance. It can also be argued that TQM works to improve the performance in the long term, because it allows textile companies become more innovative.

With this study, we conclude that Portuguese companies (in the textile sector) must have a good Quality Management capacity, but should also focus on innovation as a differentiating factor, which mediates the relationship between Quality and Organizational Performance. New products and processes seem to be essential to an improved performance (measured qualitatively).

Nevertheless, this study had a low response rate which may have influenced the obtained results. Moreover, the measurement of the essential constructs of this study was based on previous studies, hence changing the scales lead to alteration of the results achieved.

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# THE GLOBAL CYBER SECURITY WORKFORCE - AN ONGOING HUMAN CAPITAL CRISIS

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## ABSTRACT

*Cyber threats pose substantial risk to government, businesses and individuals. There is an alarming shortage of trained professionals and academic programs to train and produce these professionals. Many countries including the US and New Zealand see this as a human capital crisis. This paper discusses the severity and various dimensions of this crisis. An analysis of data from a cyber security research centre collected on cyber attacks is presented, practical solutions are proposed and examples from New Zealand are detailed in this paper. The paper draws conclusions based on the comparative data collected on New Zealand and Japan.*

*Keywords:* Cyberspace, security, workforce.

## INTRODUCTION

Insufficient attention paid to cyber security is a major risk internationally, nationally, to businesses and to individuals. The shortage of cyber security professionals to address this risk, and a lack of education programs to train these professionals, has led to a “human capital crisis in cybersecurity” (Evans & Reeder, 2010, p.1). This has serious implications due to the increased reliance on the services and information that make up cyber space. This is especially true with Small to Medium Enterprises who, due to a number of reasons, may be less protected, making this even more significant in New Zealand where 97.2 of businesses fit this category (Ministry of Business, Innovation and Employment, 2013). Cybersecurity may be defined as

“the collection of tools, policies, security concepts, security safeguards, guidelines, risk management approaches, actions, training, best practices, assurance and technologies that can be used to protect the cyber environment and organization and user's assets”

based on ITU-T Recommendation X.1205 (International Communications Union, 2008).

Cyber crime is bigger than the global black market in marijuana, cocaine and heroin combined. Globally in 2012, consumer cybercrime cost 110 billion US dollars and was experienced by 556 million people – that is 1.5 million people per day (2012 Norton Cybercrime Report). In 2012 cybercrime is estimated to have cost New Zealanders 463 million dollars (Halls, 2013), and the Norton Report on Cybercrime (Palmer & Merritt, 2012) suggested that 72% of adults in Australasia were victims of cybercrime. However, many New Zealanders do not take cyber security seriously, and are unaware of major cyber security risks that they might encounter or to which they might expose themselves – distance has partially protected New Zealand from organised crime in the past, but cyber crime has no borders. This is a global issue, with many consumers having poor or no security on their computers, cell phones and other digital devices (Palmer & Merritt, 2012). These monetary figures do

not take into account the damage to reputations of both individuals and companies, or the risk to governments, that malicious cyber activity can cause.

Cyber criminals also target governments and governmental infrastructure. In May 2013, Amy Adams, New Zealand's Communications and Information Technology Minister, outlined that in 2012 New Zealand's National Cyber Security Centre incident summary reported an increase of about 50 per cent in serious cyber intrusions when compared to 2011. These serious incidents met a threshold of putting New Zealand government information or critical national infrastructure at risk. There were 134 of these incidents in 2012 and by May 2013, 149 had occurred, showing the trend of rapid acceleration continuing.

Governments have recognised the seriousness of cyber attacks, with the UK governments National Security Strategy classifying cyber attacks as being at the same level as terrorism (Association of Records Managers and Administrators, 2013) and the US President recently stating "cyber threats pose one the gravest national security dangers that the United States faces." (The White House, Office of the Press Secretary, n.d.). Although this has been recognised for some time (Reppert, 2005) governments have been slow to respond with formal cyber security strategies being developed as late as the late 2000's ((UK, USA and Australia in 2008/9) or early in this decade (New Zealand in 2011)

Businesses are also under attack from cyber criminals. "A recent study of UK organisations revealed that 83% experienced a data security issue last year [2012]" (Association of Records Managers and Administrators, 2013). Companies are investing in cyber security education and technology to protect themselves from cyber threats. Target in the US for example is "investing US\$5 million in a multi-year campaign to educate the public on the dangers of scams, after the company disclosed that up to 110 million people may have been affected by a data breach at the retailer's U.S. stores" (Ribeiro, 2014). IBM have expanded their Cyber Security Innovation Program, where they work with universities to develop programs and fund research in cyber security (Lemos, 2013). Business is also having to grapple with the issues that bring-your-own-device are causing, with many staff accessing company IT with their own phones and computers, which are often considerably less secure than those overseen by IT departments.

## **CYBER THREATS, CYBER SECURITY EDUCATION AND WORKFORCE IMPLICATIONS**

There has been a recognition that cyber security research is an increasingly important area in the field of computing, however it has been suggested that this is an area that has been neglected (McGettrick, 2013) and only in recent years has there been an increased focus in the field. There is global recognition by industry (Lemos, 2013), academia (York, 2013; Platt, 2013; Dodge, Torgas & Hoffman, 2011; Assante & Tobey, 2011)) government (Evans & Reeder, 2010; NZ Government, 2011; Cabinet Office, 2009; Homeland Security, 2011) and industry organisations that there is a need for people who are experienced in cyber security, and that this need is not being filled. Four years ago the following was stated "the cyber threat to the United States affects all aspects of society, business, and government, but there is neither a broad cadre of cyber experts nor an established cyber career field to build upon, particularly within the Federal government" (Evans & Reeder, 2010, p.1), however progress on addressing this issue has been slow. There is also a perception amongst some that "the evolution of a university-level cybersecurity curriculum is being stunted by the culture and values in universities as well as by our ignorance" (Schneider, 2013) and that there is fragmentation in the training (Hoffman, Burley and Torgas, 2012), to the detriment of the development of the cyber security profession. Hoffman, Burley and Torgas (2012) suggest that cyber security as a field is very new, and that it benefits from a more cross functional approach from other disciplines, rather than the siloed approach that many universities take. Bagchi-Sen, Rao & Upadhyaya (2009) agree that cyber professionals need to merge IT knowledge with other fields such as physical security, privacy management, business contingency and legal matters. They also suggest that credentialisation has not developed enough prestige in the US.

### **Cyber Threats and their proliferation**

There are many types of cyber threats which include cyber crime, cyber espionage, hacktivism, cyber terrorism, cyber bullying and phishing (Ma, Ofoghi, Watters & Brown, 2009; McCombie, Watters, Ng & Watson, 2008). Some of the broad categories are outlined below.

Botnets are a collection of compromised computers which may be used to generate and distribute spam, viruses and other harmful programs. They have become more widespread, resilient and camouflaged, with an increasing reliance on the use of the 'Darknet' (Sophos, 2013). Recent public examples of the use of botnets is ransomware such as Crpytolocker where "once your data has been encrypted by the bad guys, the only way to retrieve it is with the private key stored on their server – for which you have to pay the criminals" (Sophos, 2013, p 5). Android malware, first detected in 2010 (Sophos, 2013) is proliferating, and infiltration by botnets and other malware is used to ransom phone owners, steal their data, and prevent their full usage of the phone. Google is fighting back, but Sophos found over 300 malware families focussed on androids alone in their 2013 research. Operating systems such as Linux and MacOS X have also been found to have vulnerabilities that are being exploited by cyber criminals, allowing them access to users of these systems. Web based malware is becoming more prevalent as the internet pervades all aspects of our lives, and compromised web servers deliver "some exceptionally serious malware" (Sophos, 2013, p.17) to computers that access web sites. Older software is also likely to become riskier to use, and with some Windows and Office support finishing in April 2014 this could be a serious target. And scams and spams of varying levels of seriousness continue to be used by cyber criminals.

## **Cyber Security Risks to Countries and Individuals**

National infrastructure is an area of considerable concern. Our reliance on IT to run most infrastructure systems make them vulnerable to cyber attacks. These systems include power grids and water supplies – cyber criminals could take control of the power grid, or of government IT systems. Cyber theft can also be from organisations – attempting to steal money or gather information that can be used to steal money (for example credit card numbers). Banking systems have been attacked requiring ongoing responses from the banking sector (Motley, 2012). Theft of personal information and of identities of customers of targeted organisations that can be used by cyber criminals is also increasing – the attack on Target which occurred in the US is evidence of how much information can be stolen relatively easily (Perlroth, 2013). On a more personal basis, on a daily basis individuals are convinced by emails to give strangers money, enter their online banking passwords, or allow cyber criminals access to their computers and pay for software that is not required to "fix" their computer.

Cyber bullying can occur through IT devices (including cell phones) and IT tools such as email, Facebook, and ask.fm. Tragic outcomes of this bullying include people taking their lives. Interfering with electronic medical devices, for example pacemakers which could be externally controlled, could be fatal. Cyber ransom is the practice of taking exclusive control of IT devices and the individuals or companies whose devices are blocked being required to pay a ransom in order to regain access to their devices. The easy availability and transferability of information brought by the reliance on electronic storage and electronic communications has also enabled activities of a political nature, such as hacktivism, which may have harmful consequences.

## **THE HUMAN CAPITAL CRISIS AND CYBER SECURITY JOB OPPORTUNITIES**

The rise in concern over cyber security issues, particularly at governmental and organisational level, has resulted in concern about the number of cyber security graduates and cyber security professionals available to protect the cyber sphere. There is a recognised international shortage of cyber security professionals.

Governments have reacted to this demand with a variety of strategies. A key part of the 2011 New Zealand Cyber Security strategy is to work with educators to meet the demand for cyber security graduates (NZ Government, 2011). The US government has developed the National Initiative for Cybersecurity Education.

"A nationally-coordinated effort comprised of over 20 Federal departments and agencies, academia, and industry. The mission of this initiative is to enhance the overall cybersecurity posture of the United states by accelerating the availability of educational and training resources designed to improve the cyber behaviour,

skills, and knowledge of every segment of the population, enabling a safer cyberspace for all” (Homeland Security n.d.) .

This initiative has four components, one of which is the Formal Cybersecurity Education component, which “aims to strengthen the academic pipeline leading to cybersecurity careers” (Homeland Security n.d.). Other components of this initiative support the workforce structure, cybersecurity awareness, and training and professional development in cyber security. In the United Kingdom the government is working with higher education institutions to develop cyber security programmes, with two universities being funded by the UK’s Department for Business, Innovation and Skills and the Engineering and Physical Sciences Research Council Association of Records Managers and Administrators, 2013). In Australia one of the strategic priorities stated in their cyber security strategy is to promote the development of the cyber security workforce (Australian Government, 2009).

Many countries now have a cyber security strategy and a government department responsible for cyber security – in NZ this is the National Cyber Security Centre (<http://www.ncsc.govt.nz/>). There is also a recognition that there is a lack of cyber security expertise and government agencies are working with the education sector to address this (Lemos, 2013). However the gap between the need for trained cyber security professionals and the supply of these professionals is still wide. The US Occupational Outlook Handbook predicts that IT security jobs will grow 37% between 2012 and 2022 (Bureau of Labor Statistics). The competition for cyber professionals remains strong as demand outstrips supply (Lemos, 2013; Fitzpatrick, 2012A) – this seems likely to be the case for some time. Many educational institutions are developing programs to fulfil this need. Internationally cyber security programs in higher education are booming (Chang, 2013; York, 2013; Association of Records Managers and Administrators, 2013) and alternative ways of becoming qualified such as certification and credentialing are being explored, particularly as many cyber security professionals emerge from hacker culture (Platt, 2013) and may not have formal qualifications from traditional institutions.

## **Cyber security education in New Zealand**

Several tertiary institutions in New Zealand have now realized the need for developing cyber security programs. For example Unitec Institute of Technology in Auckland developed a co-ordinated response to this skills gap by developing a number of programs at all levels of higher education starting as early as 2011. These programs are supplemented by the research undertaken in the Centre for Computational Intelligence for Cyber Security at Unitec. These programs include:

- Undergraduate degree pathway in cyber security
- Graduate Diploma in Cyber Security
- Master of Computing – cyber security endorsement
- Doctor of Computing (professional doctorate)
- Joint badged PhD - NAIST, Unitec, and NICT.

A number of courses have been introduced through these programmes, and students start taking courses related to cyber security in their first year of studies. These courses include advanced concepts in cyber security at undergraduate level and cloud and mobile security at postgraduate level.

Other New Zealand institutions have limited offerings and these include a range of courses in the University of Auckland, a new University of Waikato Master’s program, and offerings by WelTec in Wellington. Massey University has also recently strengthened its cyber security capability and other universities including AUT University are actively pursuing similar initiatives.

This is however by no means sufficient for a country like New Zealand, where an ultrafast broadband service has been introduced as one of the government’s election promises. The security of fast internet would require a much larger workforce than can be provided through these limited programme offerings. This has been recognised by government and tertiary providers and is being addressed by institutions throughout the country. Closer collaborations and some joint offerings supported by industry is a necessity if this workforce is to expand to meet demand.

## RESEARCH INITIATIVES

There is only one established centre for cyber security research, and a newly established cyber security lab, at tertiary institutions in New Zealand, although many institutions have realized the need for such centres and have taken initial steps towards setting up research facilities for cybersecurity. Established in 2011, the Computational Intelligence for Cyber-Security (CICS) facility at Unitec is a joint venture between Unitec Institute of Technology New Zealand and National Institute of Information and Communications Technology (NICT) Japan.

This centre provides cutting edge cyber security monitoring capability, aiming to build human and technological capital in New Zealand and explore opportunities to engage relevant stakeholders and an alert system that is able to provide security to NZ including our businesses. This centre aims to:

- Serve as a cyber security hub
- Conduct and foster applied, high impact cyber security research
- Provide cyber security education to develop highly productive talent
- Produce highly employable graduates
- Help create public awareness
- Sponsor, coordinate, and provide cyber security information and training to the public

International research collaboration is essential to fight the global threat posed by cyber crime. Recognizing this need, a partnership with NICT in Japan has provided us with both a cyber security monitoring system and an attack alert system which form some of the tools used in the cyber security research centre. Collaboration with Nara Institute of Science and Technology in Japan (NAIST) has further strengthened the centre's research capability and doctoral level education through the development of a joint PhD focussed mainly on cyber security.

This research facility is researching ways to help prevent future attacks. It will help create a safe, secure and resilient cyber environment for New Zealand. We are providing advanced and up-to-date training and education for students wanting to pursue a career in cyber security. In 2013, the University of Waikato launched a cyber security laboratory to strengthen their cyber security capability. It is hoped that this centre will be able to help other institutions develop similar facilities both nationally and internationally.

### **Research Centre for Computational Intelligence for Cybersecurity (CICS)**

The centre based at Unitec is modelled on Japan's headquarter centre and has technology which monitors cyber traffic coming in and out of New Zealand. The two centres share their data and information in order to help analyse and control the situation of cyber attacks.

As cyber security is becoming a rapidly developing profession, the centre provides advanced and up-to-date training and education for students wanting to pursue a career in cyber security. Commentators suggest that if you want job security, look to cybersecurity (Fitzpatrick, 2012B). The centre also allows students to gain hands-on experience with working on a number of current cyber security projects, and will give these students access to opportunities to travel to Japan and work on cutting edge equipment. The centre is working to increase the security capable workforce in New Zealand.

The collaboration between Unitec and NICT also aims to increase awareness with the public about the risks of going online, to develop and maintain a globally competitive cyber security workforce, and to encourage and engage people to become interested in science, technology and cyber security. The centre will in future offer short courses and seminars to increase public awareness and help combat cyber security risks to the public.

### **The Cybersecurity Lab – technical aspects**

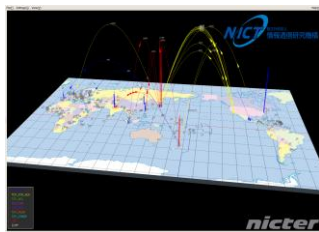
The lab is part of CICS and consists of sophisticated hardware and software some of which was imported from Japan through NICT. The equipment includes serves, terminals, sensors, networking equipment and specialised software. The hardware includes the following equipment:

- a) 6 x Dell Poweredge R210-II Servers
- b) 2 x Dell Powerconnect 5548 Switches
- c) 2 x 50" Monitors
- d) 2x 30" LED Screens
- e) Rackspace as required
- f) Fortinet 110C Firewall
- g) Dlink DMC-300SC Media Converter for fibre connection to Building
- h) Core BigIron RX16
- i) Switch-ports to Cisco 3560g Other equipment

Currently, the centre hosts three network monitoring systems

- (1) Network Incident analysis Centre for Tactical Emergency Response (NICTER) - see Figure 1. The system deploys several analysis engines taking advantage of data mining techniques to analyse the monitored traffic.
- (2) The NIRVANA system (see Figure 2). The system visualizes the Unitec campus network traffic following through a network in real time, which allows a network administrator to promptly check the network for proper connections, fault detection, congestion, and setting errors.
- (3) The Daedalus Alert System (see Figure 3). The system monitors computers of Unitec campus network for any suspicious activity and can visualize the progression of an attack as it moves through the network.

**Figure 1. Network Incident analysis Centre**



**Figure 2. The NIRVANA system**



**Figure 3. The Daedalus Alert System**



Key research topics currently being undertaken at the Centre include:

- Agent-based network intrusion detection
- Real time Darknet and Livenet traffic monitoring
- Malicious software and email spam analysis and detection
- Firewalls vulnerability assessment
- Decentralized network security
- Federated network traffic analysis
- Multi-agent coordination mechanisms and platforms

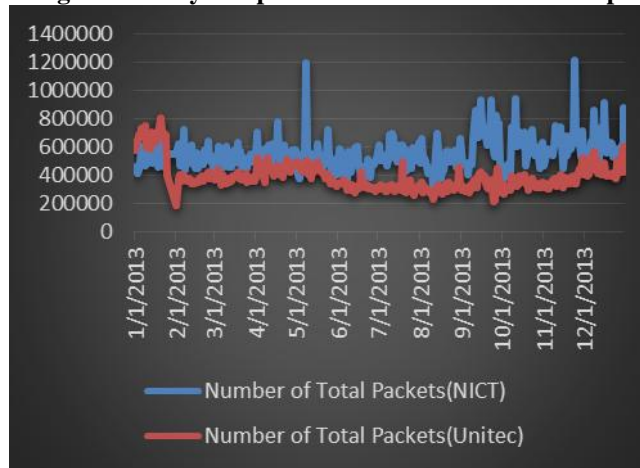
### Monitoring of Attacks

The centre currently monitors 2000 Darknet IP addresses in New Zealand and 4000 in Japan. Figure 4. below shows a daily comparison of the number of attacks on those IP addresses in New Zealand and Japan over a period of 12 days, and Figure 5. provides an annual comparison.

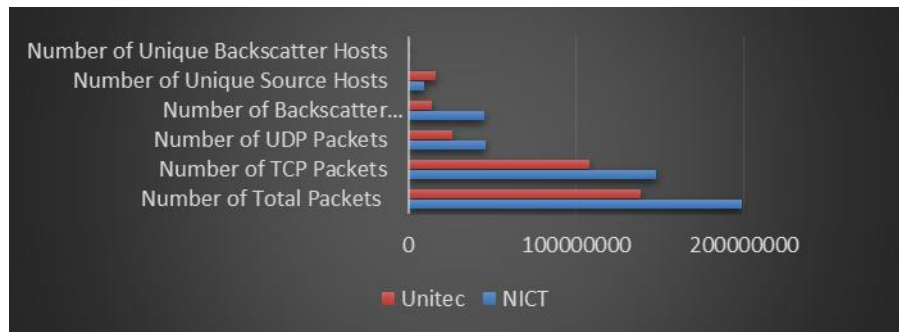
Given that the number of IP addresses monitored in Japan is double the number that are monitored in New Zealand it would be expected that the number of packets detected would reflect the same ratio. However looking at the total number of packets received it seems that there are considerably more attacks on the New Zealand IP addresses.



**Figure 4 Daily comparison of attacks – NZ and Japan**



**Figure 5. Annual Comparison of six different types of packets detected in the Darknet space**



**Table 1. Number of attacks in 2013**

Measurements (2013)	NICT	Unitec
Number of Total Packets	199207181	138312346
Number of TCP Packets	148010207	107727061
Number of UDP Packets	46017305	25830316
Number of Backscatter Packets(SYN_ACK)	45299988	13499502
Number of Unique Source Hosts	9153129	15793291
Number of Unique Backscatter Hosts	234086	191907

Table 1 shows that threats to security are not proportional to the population, nor are they dependent on the extent of the use of the Internet. A possible explanation for the discrepancy is that the incidence of attack depends on how vulnerable attackers believe a country is, and the perceived vulnerability of systems and infrastructure in that country. Moreover, ‘vulnerability’ has a network effect. Vulnerabilities present in one country may translate to increased attacks on the infrastructure in related countries dependent on the nature of their interconnectedness. It is important for every nation to keep their communications and network infrastructures safe, and this can only be done with a highly trained workforce.

# **A SOLUTION TO THE SHORTAGE OF CYBER SECURITY PROFESSIONALS**

To address the problem, higher education institutions can provide responses at different levels, including providing options for people with different skill levels for example:

- Short courses covering particular security issues/skill needs for people already working in IT but needing further security training

- Certification preparation programmes to formally certify the presence of cyber security skills

- Graduate diplomas giving graduates from related IT areas opportunities to retrain in a new field in a cost- and time-effective manner

- Bachelors programmes providing well qualified security professionals

- Postgraduate programmes provide the opportunity for highly technical cyber security research and interaction with industry

## **Quick Response**

Short courses can be offered for IT staff and managers, which may be heavily technical or strongly informational depending on the audience. Less technical courses may be best for the home user or small business owner wishing to protect their business. New Zealand is dominated by small businesses, with over 90% employing fewer than 20 people (Ministry of Business Innovation and Employment, 2013), and it is unlikely that a security specialist will be one of the employees, so this is particularly important in the New Zealand context.

Certification is another option for those who have existing skills and seek a credential, without the need for a long period of study to get it. More formal programmes can also offer a quick upskilling opportunity to graduates. Graduate Diploma programmes help graduates to move into cyber security from other careers. Many institutions in New Zealand offer Graduate Diplomas that allow students to focus on particular pathways depending on their interest. The Graduate Diploma in cyber security offers students the opportunity to focus on cyber security as a separate career, or to introduce cyber security awareness into their current career.

## **Longer Term Considerations**

It will be important for industry, academia and the government (at national and regional levels) to conduct workforce planning exercises, and then collaborate to implement these plans. A similar broad multi-sector approach will be necessary to highlight cyber security issues in the community, as many cyber crimes affect individual users of IT. Academia will need to be proactive in collaborating with industry to ensure that the skills graduates are being taught remain relevant to the cyber security issues faced by industry – a decade ago who could have comprehended the challenges that bring your own device would cause.

As a result of this cross sector collaboration to develop the cyber security workforce, local responses may emerge to the cyber threats. However much the nature of this education may vary according to regional and local needs, it is important that areas such as ethics, policy, and governance are not neglected in the education of cyber security professionals. No matter how technical the programme may be, these areas are too important to neglect.

# **CYBER PROTECTION FOR BUSINESSES AND INDIVIDUALS**

At a nation level, there is a need for increased cyber security awareness at an organisational level and a personal level. Organisations and individuals can do a lot to protect themselves from cyber attack. Following the following recommendations will significantly reduce the chances of exposure to cyber attacks, or will mitigate the effects of these attacks.

## Organisational recommendations

One of the main challenges in the organisational setting is dealing appropriately with the multi-faceted nature of cyber security, especially for small organisations. The issues surrounding cyber security are complex and result from an interplay between human, legal, technical and business factors. Many organisations, especially small organisations, are not ready to take on this challenge.

A particularly pressing issue is that an adequate response to cyber security threats requires trust in, and collaboration with, other organisations that are competitors in a business sense. Hackers are primarily driven by financial motives, and tend to be specialised on particular industries. As a result, there is a significant benefit in competitors sharing cyber security intelligence data, such as malicious IP addresses, malicious URLs and attack tactics used. As an example, in the practical investigation of phishing URLs it is often possible to determine attack pages aimed at other related organisations. Hackers make mistakes too, and are sometimes not that careful about limiting access to the directories on their web server. This allows investigating security teams to discover attack sites that have been used against others or – more importantly – are about to be used against others.

The following broad recommendations should help small organisations get on the path towards an improved cyber security posture:

1. Instigate a cybersecurity task force with management, technical and legal, audit and compliance representation. The cyber security task force is responsible for driving the cyber security strategy of the organisation. For small organisations, it is possible to pool efforts in this area, for instance through utilisation of business associations.
2. Have a technical representative join a trust based network, such as the NZITF in New Zealand. In these networks, security professionals share details and solutions for cyber security problems, which are relevant to most organisations.
3. Ensure that an appropriate incident response plan and capability is in place. With the increase in both number and sophistication of cyber attacks, for most organisations the occurrence of an incident is no longer a question of ‘if’ but ‘when’. Being able to plan and determine a response without the added pressure of having to deal with an incident is an opportunity too precious to waste.
4. Instigate a number of technical controls, such as the following
  - a. Have a secure firewall with protection controls
  - b. Ensure the network has up-to-date virus software, and that anti-virus scans are undertaken after every update of this software
  - c. Ensure all accounts are password protected with strong passwords, and regular compulsory changes
  - d. Ensure password expiry mechanisms are in place
  - e. Have robust cyber security policies, and enforce these policies at all levels
  - f. Consider multi-factor authentication
  - g. Ensure this policy covers mobile devices and includes password protection and encryption of strategic information
  - h. Ensure automated back-ups of all information occur daily (thus information cannot be held for ransom)
  - i. Have a robust BYOD (bring your own device) policy including enforcing password protection to your network
  - j. Restrict staff who have administrative privileges to trusted few
  - k. Secure WIFI access, ensuring it is encrypted and hidden, with password protection of routers
  - l. Ensure security patches are applied in a timely fashion
  - m. Only allow those with administrative privileges to download software onto the network

## Individual recommendations

Like organisations, individuals can also take some small beneficial steps to improve their personal cyber security posture. One of the most pressing issues for individuals is the development of a sense of digital hygiene, and prevent the leakage of personal data from heavily consumerised devices.

Some simple technical recommendations are

1. Do not use the same password for all logins, and ensure that the passwords used are strong
2. Password protect all devices – mobile and home based
3. Do not open emails from strangers – or if you accidentally do, do not open any attachments or click on links in these emails
4. Secure WIFI access, ensuring that it is not open, and with password protection of the router, and uses WPA encryption
5. If an online offer seems too good to be true, it probably is – delete the email!
6. Do not respond to online requests for Personally Identifiable Information (PII); most organisations – banks, universities, companies, do not ask for your personal information over the Internet, and will definitely not ask you to reveal your password to a third party
7. Review the privacy settings on social media accounts regularly, to ensure access to your personal information is limited

Some more complex technical remediations are

1. Use JavaScript whitelisting while in a browser session. With the exception of Internet Explorer, most browsers now support easy to use JavaScript whitelisting mechanisms. The smart use of JavaScript whitelisting prevents so-called ‘drive-by’ attacks.
2. Install and use the Microsoft Enhanced Mitigation Toolkit (EMET), which is a free add-on to the Windows Operating system. This tool prevents many advanced attacks.

## CONCLUSION

As seen in the figures and tables above, the comparative data outlined above regarding attacks on New Zealand and on Japan reveal that the New Zealand takes considerably more attacks than are made on Japan. This confirms that a cyber security crisis exists, and New Zealand is not immune from this crisis. Superhighways are created in the new virtual world, and they are growing exponentially. Like real highways, there is a need for designers, for legislative controls, and for a police force to make sure that all those using the virtual superhighway remain safe and protected from harm. Momentum is gathering at the governmental level and at the institutional level to increase education programmes at all levels of society, and to increase the numbers of graduates in cyber security, however currently insufficient programmes shows there needs to be a wider national response to the human capital crisis in cyber security that exists. It is the responsibility of educators to accelerate this progress.

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# LOGISTIC FLOWS THROUGH THE FUNCTIONS OF THE COST MANAGER

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## ABSTRACT

*The enterprise logistics is complex for his study, given its close relationship with almost all the areas of a company, therefore have created four quantitative-qualitative models intended to facilitate teaching. The first of these models, the Supply, Production, Distribution and Inverse Logistic model (LSPDI) does an analysis of the logistics through his flows and the second the Logistic Model Based on Positions (LoMoBaP), studying business logistics through the functions they perform who have positions relating to the same. In this work are integrated these two models, study the flows of an organization through some of the functions performed by one of the positions of the LoMoBaP, Cost Manager specifically. It is possible to enunciate this way the objective of this work: To analyze the logistic flows of an organization through the functions of the Cost Manager of the Logistic Model Based on Positions (LoMoBaP). To achieve this general objective and specific objectives, which are derived from the same, will be used the Integrated-Adaptable Methodology for the development of Decision Support System (IAMDSS).*

**Keywords:** Business Logistics, Logistic flows, Costs, Logistic models, LSPDI (LAPDI), LoMoBaP (MoLoBaC).

## INTRODUCTION

When trying to explain the business logistics great difficulty arises and it is the close relationship that it has with many fields of knowledge and with almost all areas of the organization, to mention three of the most relevant and some of the authors who have studied, have:

- Finances (Alferink, 2010; Blackman et al., 2013; Chen & Hu, 2011; He & Tang, 2012; Hofmann, 2005), although, some of these authors, partially make this relationship through the supply chain (SC) and the Information technologies. But clarifies Wenwen (2010) that sometimes speaks indifferently of logistics and finance, as finance and SC. Although it is important to emphasize, as they do Große-Ruyken et al. (2008), the relationship between finance and logistics through cash conversion cycles (CCC).

- Human Resources (HR). When the relationship between HR and logistics it does, the first thing is to pay attention to the phrase “Logistics is based on sustained human resources management” (Halley & Guillon, 1997, 488) since it is fundamental to understand the importance that for the logistics the HR have. Equally it is possible to see in Landry (2005), when she presents, in his didactic article, which the logistic chain is like a history.

- Marketing. In case of the marketing, more that to talking about relation with the logistics, should talk of integration (Bobbitt, 2004; Fugate, 2006) and this integration provides a competitive advantage to the company, that is transformed into a better service to the customer (Emerson & Grimm, 1996).

To try to understand all these area that covers or relate to the business logistics and so minimize the difficulty of its teaching, four qualitative - quantitative models have been created (Hernández et al., 2012a; 2013), which try to cover all these areas and aspects that have relation with the enterprise logistics. Although these models have emerged in the academy can be brought to the business world without any difficulty and they are (García et al., 2013):

- The model Supply, Production, Distribution and Inverse Logistic (LSPDI, in Spanish el modelo Logístico de Abastecimiento, Producción, Distribución e Inversa [LAPDI]) model, centered in the logistics flows;

- The Logistic Model Based on Positions (LoMoBaP, in Spanish Modelo Logístico Basado en Cargos [MoLoBaC]), studies logistics through the functions performed by the managers in logistic positions in an organization;

- The Logistic Model Based on Indicators for Positions (LoMoBaIPo, in Spanish Modelo Logístico Basado en Indicadores de Cargos [MoLoBaICa]), which have a strong relationship with MoLoBaC and measures enterprise logistics through indicators and

- The Logistic, Strategic, Tactical, Operational with Inverse Logistics Model (STOILMo, in Spanish Modelo Logístico, Estratégico, Táctico, Operativo con logística Inversa [MoLETOI]), which analyzes logistics through normal stages of administrative analysis: Strategic, Tactic and Operative.

The first of these models, LAPDI, as presented in Hernández et al. (2012b) focuses on logistics flows and primarily working with material flows, both direct and inverse and the information flows, including there the flows of control. But in addition to these fundamental flows, LAPDI calls attention to the monetary flows, energy flows, resources in general flows, as may be movable equipment and parts and components, and particularly flow of people. In its general outline as well as covering material flows, related to the supply, production, distribution and reverse logistics, also considers information and control flows and that are related to general aspects of the enterprise and information (See, before the references, the figure 1, taken from Hernández et al. (2012b)). On the other hand many of the positions of the MoLoBaC they are present in LAPDI, what does that two models integrate and complement each other. From this integration the objective of this work arises: To analyze the logistic flows of an organization through the functions of the Cost Manager of the Logistic Model Based on Positions (MoLoBaC).

This general objective involves three specific objectives:

- Explain the model Supply, Production, Distribution and Inverse Logistic (LSPDI [LAPDI]), already made succinctly in the previous paragraph.
- Introduce the functions of the Cost Manager (CM) of the MoLoBaC.
- Analyze the logistical flows of an organization through the functions of the CM.

To achieve this general objective and specific objectives will follow the Integrated-Adaptable Methodology for the development of Decision Support System (IAMDSS, in Spanish, Metodología Integradora-Adaptable para desarrollar Sistemas de Apoyo a las Decisiones [MIASAD]) (García et al., 2013; Hernández et al., 2013), which as noted in this work, for its flexibility and its ability to adapt to different types of research, they can be used of it, only the steps that are considered to be necessary, for which similar to the realized in other works (García et al., 2013; Hernández et al., 2013) only will follow the following steps:

- a) To define the problem that, as is indicated in the objectives is to analyze the logistic flows of an organization, using of the functions of the CM of the MoLoBaC;
- b) To prepare the first prototype, where, between other aspects, there identify the users of the final product, that because it was a research paper will be the main readers of the same. These readers are all students of business logistics, especially concerned about the costs and logistics flows, in particular those who are looking for to have new approaches and concerned with the application of quantitative-qualitative tools. It was also established the structure of the article, Which in addition to this introduction will consist of two central chapters, In the first introduced the CM of the MoLoBaC and In the last and main, there will be explained how the flows of an organization can be analyzed through the functions of the CM;



- c) Search data, in this case about models, flows, and cost logistics;
- d) Establishing alternatives, that would be the different ways that could analyze the flows of an organization, from the functions of the CM;
- e) Evaluate alternatives, in accordance with the possibility of relating logistic flows to functions of the CM;
- f) Select the alternative, according for the prior appraisal and take into account the secondary objectives, whether tacit or explicit;
- g) Implement the best alternative, illustrate through a simple schema as it can measure the flow of a hypothetical organization through the functions of the CM and
- h) Establishing controls, the mechanisms, that allow recognizing if the obtained solution, it keeps on being valid in the passing of time.

With regard to limitations and scopes, no field work will be realized, but there will do the analysis of the flows of an organization, through a hypothetical example, to thereby provide a more general view.

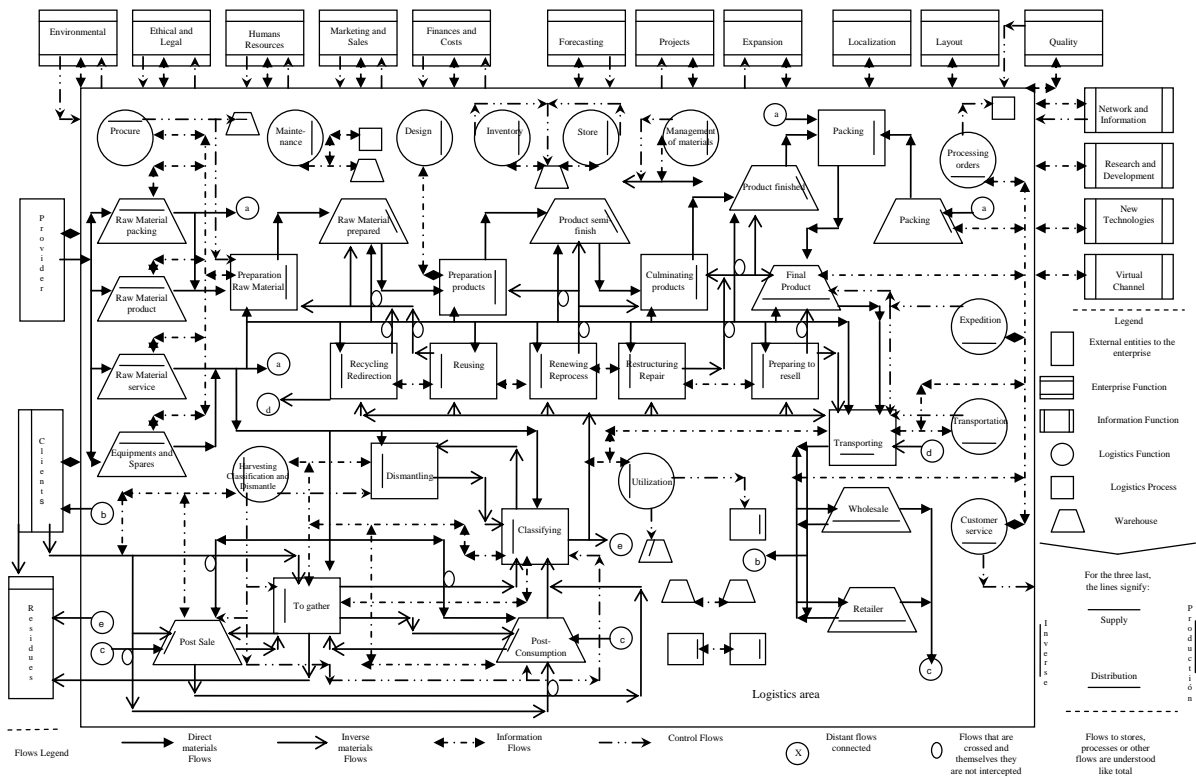


Figure 1: General scheme of LAPDI model

Source: Hernández et al. (2012b)

## THE COST MANAGER OF THE MoLoBaC

In García et al. (2013) and Hernández et al. (2013) it is possible to see that the MoLoBaC it is composed of forty-four positions, grouped into twelve areas and at the same time them into six stages. This paper will focus on one of the positions of the stage Generals of the company, particularly from the area of Supporting logistics, where the positions are: Manager of: Costs (10), Finances (11), Marketing and Sales (20), Human Resources (26) and Environmental (41) and the Ethical & Juridical Consultant (40). The numbers beside each position uses the model to identify it. The position on which this paper focuses is identified at 10 the Cost Manager (CM).

As expected the CM, is responsible for the proper handling of all costs that may be incurred by the organization, focusing primarily on those who can be considered logistics costs. This broad and great

responsibility does that the CM, keep relation with all the positions of the company and with all those responsible for functions in the MoLoBaC.

By maintaining relationship with all positions, there are many its functions and most of them related to the remaining members of the organization. From this position, the CM may have opportunity to help control many of the logistics flows, hence the study of these flows, from their perspective is favored. Moreover, the topic of logistics costs, has been studied in some depth (Gnoni & Rollo, 2010; Ilgin & Gupta, 2010; Jack et al., 2010; Thakkar et al., 2012), mention some recent, without discarding authors of previous years (Fugate, 2006; Hesse & Rodrigue, 2004; Wu & Dunn, 1995; Yang et al., 2007) and more traditional as Christopher (1992), that much of logistics analysis is based on the logistic costs.

Under this scenario, in Table 1, some of the functions to be performed by the CM will be presented, understanding, which should direct their efforts mainly to the Activity Based Costing (ABC) (Harrison & Van Hoek, 2002), more than the cost analysis based on fixed costs and variable costs. In this table 1, it will use some abbreviations as HR for human resources, IS&IR for Safety Industrial and Internal Relationship, Mgr. for Manager, and R&D by Research and Development.

Table 1. Some functions of the Cost Manager of the MoLoBaC

Intrinsic to the position.	
01	Define all cost management policies for the organization.
02	To take a strict control of the whole handling of costs of the organization.
03	Keeping up with the market cost ranges to adjust the costs of the organization.
04	Participate or be aware of acquisitions in organization to maintain a cost control.
05	Keep the whole organization updated with information relative to external costs.
06	Create methods and procedures to enable it to assess the costs of the organization expeditiously.
07	To activate mechanisms those allow him to measure the costs of every activity.
08	Find new processes to minimize costs.
Table 1. Some functions of the Cost Manager of the MoLoBaC (continuation)	
09	Take every opportunity to be present in the organization to reduce costs.
10	Coordinate the integration between different areas, enabling them to minimize cost sharing.
11	Being attentive of new materials and procedures that will minimize costs.
12	Identify and disseminate the organization, new methods and procedures to minimize costs.
13	Make efforts to minimize costs is a routine event throughout the organization.
14	Highlight and impart achievements in cost minimization achieved by each employee.
15	Identify and keep track of the areas that are most likely to incur high costs.
16	Sort all activities for their costs, while responding to the aggregated values.
17	Motivating and encourage, specially, those areas of the organization that generate low costs.
18	To show with facts, the big importance that the low costs has for the organization.
19	Establish mechanisms to make best use of all the resources of the organization.
20	Collect, classify and impart information about the organization in new technical and scientific developments, which tend to reduce costs.
Related to other positions of MoLoBaC.	
21	Collaborate, with the HR Mgr., for employees to be trained in handling costs.
22	Search, in collaboration with the Quality Manager, how to improve the quality of processes, products and services without increasing costs.
23	Seek, together to Layout Mgr, that the spatial distribution minimizes travel costs.
24	Assist the Maintenance General Mgr. and his subordinates, to minimize maintenance costs.
25	Contribute with the Replacements and failure Mgr. to minimize costs to replace equipment.
26	Incentives, the Procurement Manager and his subordinates to make inexpensive acquisitions.
27	Supporting the Finance Manager to establish the cash flows of the organization.
28	To analyze together the Inventor models Mgr., models that help to minimize the costs.
29	Participate, with Major Maintenance Manager, to schedule plant shutdowns of low cost.
30	Assist the Spare and Equipment Mgr. for their acquisitions are low cost.

31	Collaborate with Inventory Manager to set policies for inventory management low cost.
32	To work together the Order Processing Mgr., in reducing the costs, in the handling of the orders.
33	Participate with the Industrial Design Mgr., to incorporate and develop new equipment, processes and products that generate lower costs.
34	Maintain continuous contact with Picking Mgr. to minimize costs in this task.
35	Act together to managers of picking and stores for a use of the low-cost stores.
36	To give collaboration to the Dispatch Mgr., to analyze any possibility of minimizing costs in this area.
37	To help to the Physical Distribution Mgr. and his subordinates to handle his tasks to minimal cost.
38	To collaborate with the Manager of Channels, to select the least costly channels for the organization.
39	Be aware of all cost reductions that can be made in the management of transport and to communicate them to the Mgr. of Transport and his subordinates.
40	To encourage the Manager of Fleet to acquire vehicles with a better relation benefited / price.
41	To help the Manager of Routes to establish efficient routes and of low cost.
42	Search for information, together Packing Mgr. on new types, less costly packing.
43	To work with the Marketing and Sales Mgr., to know possibilities of saving in this area.
44	Participate together the Project Mgr. in projects that encourage cost reduction.
45	Study with Forecasts Mgr., trends in costs, which could affect the organization.
46	Acting together to Reverse logistics Mgr. and his subordinates, to lower procurement costs.
47	Contributing together IS&IR Mgr., minimizing personnel accidents, which can generate costs to the organization.
48	Coordinate with R&D Mgr. and his subordinates to make information service cost minimization.
49	Support the Manager of Systems Information and Networks to facilitate the management of information within the organization, to contribute to the cost minimization.
50	Get advice from Ethical & Juridical Consultant, to implement cost reduction policies.
51	Coordinate with the Environmental Mgr., to reduce the environmental costs.
52	Guaranteed by the Customer Service Manager and his subordinates good service at low cost.
Related to MoLoBaCa, LAPDI, MoLETOI and the enterprise logistics in general.	
53	Studying the flows of the organization to take every opportunity to cut costs they offer.

Table 1. Some functions of the Cost Manager of the MoLoBaC (continuation)

54	To help to generate indicators those measure his performance, of their subordinates and the entire organization in terms of cost concerns.
55	Maintain cost indicators, continuously updated.
56	Trying to lower costs at the tactical and operational performance of the organization.
57	Take care to minimize byproducts, waste and scrap which are cost drivers.
58	Ensure all logistical aspects of the organization are performed at minimum cost.
59	Align costs with the vision, mission and governing principles of the organization.
60	Incorporate all innovations, which can make the organization less expensive than the competition.
Related to SCM and the enterprise and its environment as a whole.	
61	Establish partnerships with other members of the SCM, to minimize the cost of the whole chain.
62	Take advantage any variation or change in the environment to encourage cost reduction.
63	Ensure that the lower costs in the organization favorably impact throughout society.
64	Help build campaigns for the rational use of resources in the organization and its environment.
65	Promote the reduction of energy consumption in the organization and its environment.
66	Establish partnerships with universities and institutes in the environment, to encourage cost reduction.

A major number of functions could be generated, but with the presented in the table 1, is sufficient to have a clear idea of all the control of flows that has the CM, through its functions, aspect that will be presented in summary form in the next section.

## FLOWS OF AN ORGANIZATION AND FUNCTIONS OF THE COST MANAGER

To simplify the presentation and for reasons of space, in the table 2, a summary of how the flows will be done relate of each of the areas MoLoBaC, with the different functions of the CM. In it the numbers for each function that is related to an area is reflected and the respective flows. It was decided to work with areas MoLoBaC (Hernández et al., 2012a) and not with the positions in direct form, for a major simplification. In this table 2, some abbreviations will be used for both flows as even functions. For flows the abbreviations are: CoF = Control flow, DMF = Direct material flow, EnF = Energetic flow, IMF = Inverse material flow, InF = Information flow, MoF = Monetary flow, PeF = Personal flow and OtF = Other flows that could be present in an organization. As shown in Hernández et al. (2012a), the areas of the MoLoBaC, their abbreviations that are included in table 2 and their stages of origin are: Procure (PROC) of Supplying; Maintenance (MANT) and Inventories (INVE) of Production; Order processing (ORPR), Physical Distribution (PHDI), Transportation (TRPT) and Customer service (CSER) of Distribution; Inverse Logistic (INLO) from Inverse; Intrinsic to logistic (INTR), Supported by logistic (SUBY) and Supporting logistics (SULO) from General to the company and Information (INFO) of General of information.

In this case there will be no quantitative assessment, but similar to what has been done in Hernández et al. (2012b) could be done using a Matrixes Of Weighing (MOW) Before presenting the functions of Table 2, it should be noted that the following functions: 1, 2, 6, 7, 12, 19, 21, 53, 54, 58 and 62, not be included in the table, since they are common to all areas of MoLoBaC and to all the flows that are contemplated in this work.

As can be seen in Table 2, addition to the common functions to all areas and at all flows, previously listed, the functions that greater number of times they appear are between the 20 and 50, this was to be expected, given that they are the ones who are closely associated with the positions of the MoLoBaC. It was also hoped that the flow with the greatest number of functions is the flow of information. In this case there were no other flows (OtF), but in an organization is able to treat the waste, function 57, as other flow and not as a direct material flow.

Table 2. Flows related to the functions of the Cost Manager

Areas of the MoLoBaC	Flows							
	DMF	IMF	InF	CoF	MoF	EnF	PeF	OtF
PROC	4, 8, 11, 26		4, 5, 20, 64	4, 8, 13, 65	3, 4, 11, 26	3, 64, 65		
MANT	8, 24, 25, 29		5, 20, 29, 64	8, 13, 65	24, 25, 29	64, 65		
INVE	4, 8, 28, 30, 31	28	4, 5, 20, 28, 31, 64	8, 13, 65	30, 31	64, 65		
ORPR	8, 32, 33, 34, 35	35	5, 20, 32, 33, 34, 35, 64	8, 13, 32, 65	32, 33, 34, 35	33, 34, 64, 65	34	
PHDI	8, 36, 37, 38		5, 20, 36, 37, 38, 64	8, 13, 36, 37, 65	36, 37, 38	64, 65		
TRPT	8, 39, 40, 41, 42		5, 20, 39, 40, 41, 42, 64	8, 13, 39, 41, 65	39, 40, 41, 42	64, 65		
CSER	8, 47, 52	52	5, 20, 47, 52, 64	8, 13, 65	47	64, 65		
INLO	8, 46	46	5, 20, 46, 64	8, 13, 65	46	64, 65		
INTR	8, 22, 23		5, 20, 64	8, 13, 65		64, 65	23	
SUBY	8, 44, 45		5, 20, 44, 45, 64	8, 13, 65	44, 45	64, 65		
SULO	8, 43, 57		5, 20, 27, 43, 50, 51, 57, 64	8, 13, 65	27, 43, 50	64, 65	21	
INFO	8, 49	49	5, 20, 48, 49, 64	8, 13, 65	48, 49	48, 64, 65		

Presented, in global form, as they relate the functions of the CM of MoLoBaC, with the flows of the organization and without major comments, for lack of space, then offered some conclusions and future research.

## CONCLUSIONS AND FUTURE INVESTIGATIONS

Although in this work there was no quantitative measure of the logistic flows, it could be verified that through a position of the Logistic Model Based on Positions (MoLoBaC), these flows can be analyzed. In particular, it was based on the functions of the Costs Manager (CM) and through its functions, could see the relationship between the different areas of MoLoBaC and different logistic flows that can occur in an organization. It may be noted that although most studies are focused on physical flows, whether they be material flows direct or inverse, nevertheless, in an organization the flows that meet major frequency are the flows of information. To get the relationship between flows and areas of MoLoBaC, first was presented the Supply, Production, Distribution and Inverse Logistic (LAPDI) model and then listed some of the functions of the CM of the MoLoBaC, thus complying with the general objective and the specific objectives proposed. As a future line of research recommended two ways, the first, studying the flow of a company following the scheme here established, in order to have references and values of the real world. On the other hand it is recommended to carry out studies similar to made here, but through other positions of MoLoBaC and in this way deepen this line of research.

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# MANAGEMENT INDICATORS FOR HUMAN RESOURCES MANAGER OF THE MoLoBaC

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## ABSTRACT

*Organizations have the need to measure the performance of their employees, especially its top management. Moreover to facilitate the explanation of business logistics, in academia, four qualitative - quantitative models have been created. The second of these models analyzes the logistics from the functions performed by those who have positions associated with the business logistics, hence its name: Logistic Model Based on Positions (LoMoBaP [MoLoBaC]). The third of these models, overlaps the MoLoBaC, is the Logistic Model Based on Indicators for Positions (LoMoBaIPo [MoLoBaICa]) and analyzes the logistics through management indicators for each of the positions of the MoLoBaC. In this work one of the forty-four positions of the MoLoBaC be used, to illustrate how it works the MoLoBaICa, in particular it will use the Human Resources Manager (HRM). From this analysis of the HRM of the MoLoBaC, the objective of this work arises: Illustrate the use of the Logistic Model Based on Indicators for Positions (MoLoBaICa) through the Human Resources Manager of the Logistic Model Based on Positions (MoLoBaC). To achieve this general objective and specific objectives, will be used the Integrated-Adaptable Methodology for the development of Decision Support System (IAMDSS).*

**Keywords:** Human Resources, Management Indicators, Business Logistics, Logistic models, LoMoBaP (MoLoBaC), LoMoBaIPo (MoLoBaICa).

## INTRODUCTION

One aspect which is in turn an advantage and a disadvantage business logistics is that is related to many areas of an organization. To mention only two of them, relations can be with:

- Production. The relationship between logistics and production can see through reverse logistics as noted Fleischmann (2000) or through the supply chain as Mentzer et al. (2008) do or by means of some of the important activities of logistics, mainly supply as presented Hess et al. (2007) or be obvious and direct as presented Windt et al., 2008, although they emphasize this relationship through autonomous processes.

- Information Systems. In addition to the relationship established by the Enterprise Resource Planning (ERP) with the information systems, the logistics and other areas of the company (Forslund, 2010), the direct relationship between the information systems and the logistics are the logistics information systems (LIS) (Helo & Szekely, 2005). But information systems can include various aspects of logistics, as the relations between organizations (Hadaya & Cassivi, 2007), the transport and the outsourcing (Chow et al., 2007) and even the philosophy of the work, as reflected in the article of Mistry (2005) who relates the logistics and information systems through the Just in time (JIT).

Analyze and understand all these area encompassing or related to business logistics, it is no easy task, therefore, with the intention of minimizing the difficulty of teaching the logistics, four qualitative -quantitative

models have been created, in the academy (García et al., 2013; 2013), which try to cover the majority of the areas and aspects that have relation with the managerial logistics. These models are (García et al., 2013; 2013):

- The model Supply, Production, Distribution and Inverse Logistic (LSPDI, in Spanish el modelo Logístico, Abastecimiento, Producción, Distribución e Inversa [LAPDI]) model, centered in the logistics flows;
- The Logistic Model Based on Positions (LoMoBaP, in Spanish Modelo Logístico Basado en Cargos [MoLoBaC]), studies logistics through the functions performed by the managers in logistic positions in an organization;
- The Logistic Model Based on Indicators for Positions (LoMoBaIPo, in Spanish Modelo Logístico Basado en Indicadores de Cargos [MoLoBaICa]), which have a strong relationship with MoLoBaC and measures enterprise logistics through indicators and
- The Logistic, Strategic, Tactical, Operational with Inverse Logistics Model (STOILMo, in Spanish Modelo Logístico, Estratégico, Táctico, Operativo con logística Inversa [MoLETOI]), which analyzes logistics through normal stages of administrative analysis: Strategic, Tacit and Operative.

The second of these models, MoLoBaC, consists of forty-four positions, one of them is the Human Resources Manager (HRM), which will be used in this work. The MoLoBaICa third of the four models, overlap to the MoLoBaC and as presented in Hernández et al. (2012; 2013) it will allow to measure, through management indicators, the performance of each and every one of the charges MoLoBaC. From the formal point of view, MoLoBaICa, comes in two procedures (; 2013), but should really talk about three stages, a first in which defines the management indicators and the second procedure, the measuring, is performed in the other two stages, in the second, in strict sense, the indicators measurement is made and in the third, are consolidated and reported the results. Of these three stages will not give more details, recommended reading Hernández et al. (2012). In a later chapter, within the main body of this work, will be an illustration of how it works the MoLoBaICa.

As MoLoBaICa can generate indicators that can measure the performance of each of the positions MoLoBaC, for this work will study the functions performed for the HRM. Hence, the objective of this research is: Illustrate the use of the Logistic Model Based on Indicators for Positions (MoLoBaICa) through the Human Resources Manager of the Logistic Model Based on Positions (MoLoBaC).

This general objective involves three specific objectives:

- Explain the scope, objectives and how the MoLoBaICa work, already made succinctly in the two preceding paragraphs.
- Present functions of the HRM of the MoLoBaC.
- Illustrate how the MoLoBaICa works through the functions of the HRM.

To achieve this general objective and specific objectives derived, it will be used the Integrated-Adaptable Methodology for the development of Decision Support System (IAMDSS, in Spanish, Metodología Integradora-Adaptable para desarrollar Sistemas de Apoyo a las Decisiones [MIASAD]) (García et al., 2013; Hernández et al., 2013), which as noted in this work, for its flexibility and its ability to adapt to different types of research, they can be selected of their twenty basic steps, only those who are considered to be indispensable in the moment of their application. Similar to the realized in other investigations (García et al., 2013; Hernández et al., 2013) for this work will follow the following steps:

- a) Define the problem that, as is indicated in the objectives is to explain how the MoLoBaICa works, through the HRM of the MoLoBaC;
- b) To prepare the first prototype, where users of the final product were identified, that this being a scientific article, reference is made the main readers of the same. These readers are all students of business logistics, especially those with an overview of it and that relate to the entire organization, but especially those who think about how to have new approaches and concerned with the application of quantitative-qualitative tools. In addition it will join all those interested in the measurement of business performance and finally the scholars of human resources (HR). It was also established the structure of the article, which in addition to the introduction will consist of two central chapters, in the last and principal is illustrate how we can explain the logistics by measuring performance indicators through some of the functions of the HRM, presented in the first chapter;
- c) Search data, in this case on logistic models, HR and management indicators;



- d) Establishing alternatives, that would be the different ways that could illustrate the use of MoLoBaCa, from the functions of the HRM;
- e) Evaluate alternatives, according to the possibilities of generating management indicators to measure the functions of the HRM;
- f) Select the best alternative, according to the prior assessment and taking into account the secondary objectives, whether tacit or explicit;
- g) Implement the best alternative, illustrate through a few functions can be used as indicators of management applied to the functions of the HRM and
- h) Establishing controls, the mechanisms, that allows to recognize if the solution obtained, continues being valid in the course of the time.

With regard to limitations and scopes, any field work will be performed, but the illustration of the MoLoBaCa will do using functions of the HRM, through a hypothetical example, to thereby provide a more general view.

## THE HRM OF THE MoLoBaC

As already indicated the MoLoBaC, is composed of forty-four positions, grouped into twelve areas and at the same time them into six stages (García et al., 2013; Hernández et al., 2013). This work will focus on one of the positions of the stage General to the company, particularly will work with area Supporting logistics, where there are six positions: Manager of Costs (10), Manager of Finances (11), Manager of Marketing and Sales (20), Manager of Human Resources (26), Ethical & Juridical Consultant (40) and Manager of Environmental (41). The numbers after each position uses the model to identify it. This work focuses on the position identified by number 26 the Human Resources Manager (HRM).

As might be expected the HRM, is responsible for everything related to personal of the organization, from determining in a clear and precise HR needs, within the organization, to the incorporation of more skilled personnel to meet the identified needs. But their responsibilities do not end there, but rather instead, it could say, that only begin, this personnel admitted, it must be: form, to prepare a career plan, develop, motivate, reward, and meet their needs inside and outside the organization. In addition efforts should be made to retain these personnel, but otherwise, it is necessary to prepare their disincorporation and all this in an environment that is pleasing to all personnel of the organization. For the foregoing reasons, but especially the last mentioned, the HRM, must work very closely with all personnel of the organization.

By this relationship with all the positions of the organization and in particular with all the positions of the MoLoBaC, many of its functions are related to the remaining positions of the model. Undoubtedly, all as stated above it can be understood that there are many functions of HRM. In the table 1, some of these functions will be presented with emphasis on those that relate directly to business logistics, hence some of them are inspired or have been extracted from Androjna et al. (2009); Bobbitt (2004); Redmond & Walker (2008); Yeh et al. (2006). In this table 1, it will use some abbreviations as IL for Inverse logistics, IS&IR for Industrial Safety and Internal Relations, Mgr. for Manager, and as has already been used, HR by human resources and HRM for Human Resources Manager. Some of these abbreviations will continue using the rest of the work. Also when talking of resources, inflows or outflows, it will refer to human resources, unless that indicate otherwise.

Table 1. Some functions of the Human Resources Manager of the MoLoBaC

Intrinsic to the position.	
01	Establish all policies and rules governing the management of human resources of the organization.
02	Do the organization one of the workplaces that arouse more interest in the labor market.
03	Keeping up with the movements of the labor market to adjust the requirements of the organization.
04	To create an essential profile of the personnel of the organization.
05	Participate in all new entrants to the organization and tracking them.
06	To keep informed the HR of the organization of any internal or external change that affects it.
07	To create or to take part in the creation of the best conditions of work for the organization.
08	To establish the plans of growth of the organization, as for HR it refers.
09	To work under a philosophy of Employer Branding.
10	Create social incentives that go beyond those required by law.

11	Collaborate to ensure the security of confidential information for each employee.
12	To activate mechanisms those allow him to measure constantly the performance of the personnel.
13	Be aware of new techniques in the management of HR.
14	Analyze constantly needs new organizational resources.
15	Encourage the integration of different areas of the organization.
16	Continuously updated job profiles, so that they remain challenging over time.
17	Schedule induction processes for personnel entering the organization.
18	Disseminate information within and outside the organization, about the benefits it offers.
19	Find new incentives for future entrants, as well as personal of the organization.
20	Collaborate in establishing policies and salary scales to personnel.
21	Prepare the annual recruitment plan of the organization.
22	Being part of the representation of the company before the official authorities.
23	Clearly establish the characteristics of the positions before starting the recruitment for the same.
24	Have a plan of attractive benefits to aspiring admission.
25	Take care that there is no discrimination in the recruitment and selection of personnel.
26	Prepare proposals and counterproposals to present unions.
27	Meet with depth the company, to establish recruitment policies that strengthen.
28	Establish policies to minimize employee turnover.
29	Analyze offers courses and workshops for training and personnel development.
30	Take advantage every opportunity to encourage the growth and promotion of personnel.
31	To prepare the plans of career of each of the members of the personnel.
32	To manage social benefits directed to the relatives of the employees.
33	Manage the social areas of the organization, created for the benefit of the employees.
34	Generate a harmonious and pleasant environment work, based on respect for people.
35	Create the conditions which can incorporate personnel that present a disability, either temporary or permanent.
36	Highlight and disseminate the achievements achieved by each employee.
Related to other positions of MoLoBaC.	
37	Develop, with the respective managers, annual personnel training plan.
38	Collaborate in every way, with the IS&IR Mgr. in minimizing industrial accidents.
39	Coordinate with each of the managers, personnel training plans under their supervision.
40	Encourage the Layout Manager to make a distribution of spaces that favors to personnel.
41	Participate with the corresponding managers, in projects of expansion of the organization.
42	Help create an organizational environment that takes advantage of information management to innovate.
Related to MoLoBaICa, LAPDI, MoLETOI and the enterprise logistics in general.	
43	Help to generate indicators that measure the performance of personal throughout the organization.
44	Studying the flow of people within the organization to help ensure your safety.
45	Train staff to better performance in the tactical and operational tasks of the organization.
46	To sow conscience in the personnel to minimize the waste.
47	To guarantee that the personnel are prepared to handle all the logistic aspects of the organization.
48	Prepare personal to help achieve the vision, mission and guiding principles of the organization.
Related to SCM and the enterprise and its environment as a whole.	
49	Establish alliances with other members of the SCM, to facilitate the exchange of personnel, if necessary.
50	Take advantage any variation or change in the environment to improve personal conditions.
51	Help build campaigns for the rational use of resources in the organization and its environment.
52	Promote the reduction of energy consumption in the organization and its environment.
53	To establish alliances with universities and institutes of formation, to collaborate in their training.
54	Create campaigns that integrate organization personal with neighboring communities.

Although it is possible to keep on mentioning functions of the HRM, with those presented have a clear idea of their great responsibility. Although Hernández et al. (2013) recommend twelve functions for the analysis of a position through MoLoBaICa, especially for reasons of space, in this work, only used three of those presented in table 1, as will be seen below, to develop the different stages of the MoLoBaICa, via the HRM.

## THE MoLoBaICa AND FUNCTIONS OF THE HRM

The three functions selected to illustrate the study are: the 7.- To create or to take part in the creation of the best conditions of work for the organization, the 13.- Be aware of new techniques in the management of HR and the 17.- Schedule induction processes for personnel entering the organization. In the tables 2, 3, 4, 5 and 6, which will be presented one after the other, the illustration of the MoLoBaICa will do, through the functions previously identified. As for reasons of space will be skipped some details, are encouraged to review the aforementioned works (2013). In the table 2 presents the hours dedicated to each function and in the table 3, the number of indicators used to assess each of these functions will be indicated.

Table 2. Hours dedicated to the functions of the Human Resources Manager

Employee: H. G.		
Interviews first date: 24/ 04 2014		Interviews final date: 25/ 04 2014
Position in the enterprise: Director of Personnel.		Total hours for period of time (Ht): 40
Function	Dedicated hours (Hd)	(Hd / Ht) * 100
07.- To create or to take part ...	14	14 / 40 = 35,00 %
13.- Be aware of new ...	12	12 / 40 = 30,00 %
17.- Schedule induction ...	18	18 / 40 = 45,00 %
Total	44	110 %
Total Hd / Ht: Minor to 1 __ Equal to 1 __ Major to 1 __X__		
Comments: Employee little overloaded. All its functions are related to Human Resources.		
MoLoBaC Position: Human Resources Manager.		

Table 3. Weight and number of indicators for the functions of Human Resource Manager

Employee: H. G.; MoLoBaC Position: Human Resources Manager.		
Function	Function weight	Indicator Number
07.- To create or to take part ...	20%	Two (2)
13.- Be aware of new ...	35%	Three (3)
17.- Schedule induction ...	45%	Two (2)

In the tables 4 (4a, 4b and 4c), indicators of each of the functions are presented and in the tables 5 (5a, 5b and 5c) the measurements thereof will be.

Table 4a. Indicators of the function 07

Employee: H. G.; MoLoBaC Position: Human Resources Manager.							
Function: 07.- To create or to take part in the creation of the best conditions of work for the organization.							
Function weight in evaluating the position (1 a 100): 20							
Indicator Name	Indicator Description	Mathematical Expression (Quotient)	Values			Revision conditions:	Indicator value for the function (1 to 100)
			Low	Medium	High		
Meetings	Meetings to discuss improvements	(Meetings) / 12	0	1	2	Three straight times out of range	90
The indicator Meetings annual is measured and expressed as the number of monthly meetings average.							
Improvements	Improvements achieved	(Number of improvements) / 12	1	2	4	Two straight times out of range	100
The Improvement indicator annual is measured and expressed as the number of monthly average improvements.							

Finally in the table 6, the consolidation of the results will be presented. There it can submit yields for each of the positions, the areas, the stages and the company as a whole.

Table 4b. Indicators of the function 13

Employee: H. G.; MoLoBaC Position: Human Resources Manager.							
Function: 13.- Be aware of new techniques in the management of HR.							
Function weight in evaluating the position (1 a 100): 35							
Indicator Name	Indicator Description	Mathematical Expression (Quotient)	Values			Revision conditions:	Indicator value for the function (1 to 100)
			Low	Medium	High		
Detected	New techniques (NT) detected	(NT detected) / 12	5	20	25	Three straight times out of range	80
The indicator Detected annual measured and expressed in number of techniques identified by month.							

Table 4b. Indicators of the function 13 (continuation)

Tested	New techniques (NT) tested	(NT tested) / 12	2	10	15	Three straight times out of range	90
The indicator Tested annual measured and expressed in number of techniques tested by month.							

Adopted	New techniques (NT) adopted	(NT adopted) / 12	1	5	10	Two straight times out of range	100
The indicator Adopted annual measured and expressed in number of techniques adopted by month.							

Table 4c. Indicators of the function 17

Employee: H. G.; MoLoBaC Position: Human Resources Manager.							
Function: 17.- Schedule induction processes for personnel entering the organization.							
Function weight in evaluating the position (1 a 100): 45							
Indicator Name	Indicator Description	Mathematical Expression (Quotient)	Values			Revision conditions:	Indicator value for the function (1 to 100)
			Low	Medium	High		
Revisions	Revisions to the process of induction	(Revisions) / 12	0	1	2	Three straight times out of range	80
The indicator Revisions annual is measured and expressed as the number of monthly average revisions.							
Realized	Realized inductions	(Inductions) / (People entered)	0.98	1	1	Five straight times out of range	100
The indicator Realized annual is measured and expressed as the number of inductions performed monthly average.							

Table 5a. Measurements of the indicators of the function 07

Employee: H. G.; MoLoBaC Position: Human Resources Manager.			
Function: 07.- To create or to take part in the creation of the best conditions of work for the organization.			
Indicator: Meetings.			
Numerator value	Denominator value	Indicator value	Value (1 to 100)
16	12	1,2500	83,33 (1,5 = 100)
Indicator: Improvements.			
Numerator value	Denominator value	Indicator value	Value (1 to 100)
14	12	1,1667	93,34 (1,25 = 100)

Table 5b. Measurements of the indicators of the function 13

Employee: H. G.; MoLoBaC Position: Human Resources Manager.			
Function: 13.- Be aware of new techniques in the management of HR.			
Indicator: Detected.			
Numerator value	Denominator value	Indicator value	Value (1 to 100)
240	12	20,0000	100,00 (20 = 100)
Indicator: Tested.			
Numerator value	Denominator value	Indicator value	Value (1 to 100)
100	12	8,3333	83,33 (10 = 100)
Indicator: Adopted.			
Numerator value	Denominator value	Indicator value	Value (1 to 100)
48	12	4,0000	80,00 (5 = 100)

Table 5c. Measurements of the indicators of the function 17

Employee: H. G.; MoLoBaC Position: Human Resources Manager.			
Function: 17.- Schedule induction processes for personnel entering the organization.			
Indicator: Revisions.			
Table 5c. Measurements of the indicators of the function 17 (continuation)			
Numerator value	Denominator value	Indicator value	Value (1 to 100)
24	25	0,9600	96,00 (1,00 = 100)
Indicator: Realized.			

Numerator value	Denominator value	Indicator value	Value (1 to 100)
25	25	1,0000	100,00 (1,00 = 100)

Table 6. Evaluation of the functions, positions, area, stage and company

Employee: H. G.; MoLoBaC Position: Human Resources Manager.			
Function: 07 To create or to ...	Function Weight (Pf): 20	Hours dedicated to the function (Hd): 14	
Indicator	Obtained value in the indicator (Vi)	Indicator weight (Pi)	Vi * Pi
Meetings	83,33	90	7499,70
Improvements	93,34	100	9334,00
Sum	176,67	190	16833,70
Function Value (Vf)	$\frac{(\text{Sum Vi} * \text{Pi} / \text{Sum Pi}) * \text{Pf} * \text{Hd}}{(16833,70 / 190) * 20 * 14 = \mathbf{24807,56 (88,60\%)}}$		$\text{Pf} * \text{Hd} = 280$ Accumulated Pf * Hd = 280
Function: 13 Be aware of new ...	Function Weight (Pf): 35	Hours dedicated to the function (Hd): 12	
Indicator	Obtained value in the indicator (Vi)	Indicator weight (Pi)	Vi * Pi
Detected	100,00	80	8000,00
Tested	83,33	90	7499,70
Adopted	80,00	100	8000,00
Sum	263,33	270	23499,70
Function Value (Vf)	$\frac{(\text{Sum Vi} * \text{Pi} / \text{Sum Pi}) * \text{Pf} * \text{Hd}}{(23499,70 / 270) * 35 * 12 = \mathbf{36555,09 (87,04\%)}}$		$\text{Pf} * \text{Hd} = 420$ Accumulated Pf * Hd = 700
Function: 17 Schedule ...	Function Weight (Pf): 45	Hours dedicated to the function (Hd): 18	
Indicator	Obtained value in the indicator (Vi)	Indicator weight (Pi)	Vi * Pi
Revisions	96,00	80	7680,00
Realized	100,00	100	10000,00
Sum	196,00	180	17680,00
Function Value (Vf)	$\frac{(\text{Sum Vi} * \text{Pi} / \text{Sum Pi}) * \text{Pf} * \text{Hd}}{(17680,00 / 180) * 45 * 18 = \mathbf{79560,00 (98,22\%)}}$		$\text{Pf} * \text{Hd} = 810$ Accumulated Pf * Hd = 1510
Position Value (Vp)	$\text{Sum Vf} / \text{Sum Pf} * \text{Hd} = 140922,65 / 1510 = \mathbf{93,33 \%}$ (All the functions of the position)		
Area Value (Va)	$\text{Sum Vf} / \text{Sum Pf} * \text{Hd} = 140922,65 / 1510 = \mathbf{93,33 \%}$ (All the functions of the positions of the area)		

In this final table, it can see summarized as MoLoBaICa works. In this case only worked for the HRM, but as seen at the end of the table, it was possible to have completed the study for the areas, stages or the company as a whole. With this information may be passed to present some conclusions and future research.

## CONCLUSIONS AND FUTURE INVESTIGATIONS

In a sequential manner, After commenting on a position of the Logistic Model Based on Positions (MoLoBaC), in this specific case the Human Resources Manager, have presented some of their functions and choosing a sampling of these, illustrated how works the Logistic Model Based on Indicators for Positions (MoLoBaICa), thus fulfilling the objective of this work. For illustration MoLoBaICa, functions were chosen, indicators were determined, Measurements were made of the same and with all this information it was possible to measure the performance of HRM. The great advantage of MoLoBaICa, is that in addition to measuring the performance of a position, can be done for people, whether they play one position or functions of various positions. Same can be measured areas, the stages and what is more important, the company as a whole. From the above it is seen as a line of research further work, in the academia, with other positions of the MoLoBaC and in the managerial world, measuring the performance of an organization, whether studying person per person, or

position per position or In general terms the area of the organization. In addition it is recommended that these measurements are made once or twice a year, in order to know how it has improved.

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# ETHICAL CONDUCT IN BUSINESS ORGANISATIONS: THE OPINION OF AMERICAN AND SOUTH AFRICAN MANAGEMENT STUDENTS

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## ABSTRACT

*The study explores the opinions of American and South African management students towards the ethical conduct exhibited by organisations in their respective home countries. Through the use of a quantitative survey, primary data were collected via a self-administered questionnaire. A quota sample was employed to pursue a target of 250 respondents at a South African and an American university. The data were subjected to statistical analysis using SPSS. The analysis employed descriptive statistics as well as t-tests to test the constructed hypotheses. The findings revealed that students in South Africa and in the USA perceived ethical conduct in much the same way. Interesting similarities and differences between American and South African opinion were also identified.*

**Keywords:** Ethical conduct; Business ethics; Stakeholders; Cultural differences.

## INTRODUCTION AND BACKGROUND

In the management of organisations errors often occur in ethical conduct (Clark, 2006). This stems from *inter alia* competitive pressures, resulting in extreme demands on employees to meet goals that are not realistic. This in turn leads to “cutting corners” and acting unethically. Also, expediency is often favoured over quality, causing truth to be stretched. Therefore, the long-term benefits for the organisation are not considered (Harvey, 2002). Literature (Rossouw & Van Vuuren, 2006; Harvey, 2002; Abratt, Bendixen & Drop, 1999) therefore suggests that organisations desire to do what is ethical in order to be successful, as it all boils down to the reputation of the organisation and in what light stakeholders perceive the behaviour and intentions of an individual organisation. However, years of training within large organisations has led the authors to different insights as far as the rank-and-file employee is concerned. Inevitably, this has led to a questioning of the *bona fides* of organisations in this regard.

## PURPOSE OF THE STUDY

From the introductory comments it is evident that acting ethically and being ethical imply two different things. The acid test would be to ascertain how ethical behaviour of organisations is perceived by parties external to these business organisations. Consequently, this study endeavours to answer the following research question:

***How do American and South African commerce students perceive the ethical conduct of business organisations in their respective home countries?***

To answer this question, **the primary objective of this study is:**

***to measure the opinion of American and South African commerce students toward the ethical conduct of business organisations in their respective home countries.***

Business ethics literature focuses on what should be done, and has been done, from the organisational point of view to promote ethical behaviour. Not enough literature exists on peoples’ opinions of organisations’ ethical behaviour. This study attempts to shed more light on how organisations are perceived as corporate citizens.

# LITERATURE OVERVIEW

Ethics can be considered “the science of morality” (Nieman & Bennett, 2006). Some believe that being moral stems from a concern about being caught doing something wrong, while others believe that being moral and ethical is a built-in characteristic of people who are looking out for each other and the continued existence of their species (Rosenstand, 2005). People’s definitions of good and evil differ, and only when actions of a legal nature are taken against them, do they realise they acted wrongfully (Pastore, 2003). Being ethical therefore involves integrity, sound values and doing what is honest, right, and good (Harvey, 2002; Bradley & Schrom, 2004).

Business ethics is a particular context to which ethics can be applied. According to Nieman and Bennett (2006:239), business ethics becomes apparent:

*“...where the moral duties of ethics apply to the activities of an organisation.”*

It is thus the discipline that deals with the values and rules of behaviour of society, while pursuing the goals of an organisation. Hertz (2006) states that organisations have a duty to regard all those affected in every decision it takes. Ethically questionable behaviour may have enabled organisations to acquire a competitive advantage in the past, but today such practices are frowned upon on a societal level. As mentioned, competitive pressures could result in dishonesty, focusing on short-term benefits, and compromising quality in return for expediency (Harvey, 2002). Simms (2006) also indicates that too little attention is being paid to the long term, due to extreme demands on people in organisations. Behaving ethically has a very important place in business operations and performance. However, focusing on the short term, cutting corners, and placing short-term financial gains above all else will not ensure business success, and is the breeding ground for unethical behaviour. Ethical codes are established in organisations to avoid the bad publicity that follows ethical blunders (Harvey, 2002). However, ethical behaviour starts with the individual. Thus, organisations must be cautious as to who they employ and form relationships with (Monaghan, 2005). Brandl and Maguire (2002) mention that guaranteeing ethical behaviour is a huge challenge, but organisations cannot afford to ignore this, as ethical behaviour contributes to long-term sustainability.

Friedman (1970) postulated that the only responsibility an organisation really has is toward its own shareholders. Friedman’s Shareholder Theory purports that managers should manage the organisation in the best interests of the shareholders by maximizing their return on investment (Rossouw & Van Vuuren, 2006). With increased emphasis on the rights of staff, protection of the natural environment and fair competition, however, this view has come under scrutiny. In reaction to Shareholder Theory, Freeman and Evan (1993:76) ask:

*“For whose benefit and at whose cost should the organisation be managed?”*

Freeman and Evan concluded that there were several arguments that led to a rejection of Friedman’s original stance. These include legal arguments (courts have ruled that the organisation has a duty towards parties other than shareholders), as well as economic arguments (contrary to the “invisible hand”, organisations have damaged the environment and disrupted society and have been heavily regulated (Rossouw & Van Vuuren, 2006)).

These arguments show that managers of organisations need to serve the interests of more than just shareholders. According to Rossouw and Van Vuuren (2006), managers have an obligation not to violate the legitimate rights of others, and are responsible for the effects of their actions on others. The exact number and labelling of stakeholders differs (Carroll, 1999; Griseri & Seppala, 2010; Lewis, Goodman & Fandt, 1998; Volberda, Morgan, Reinmoeller, Hitt, Ireland & Hoskins, 2011), but stakeholders identified include owners (shareholders), employees, suppliers, customers, environmental groups, media, society, local communities, managers, business partners, trade unions, and government. Carroll (1999) provides a classification of stakeholders based on the nature of their relationship with the organisation, and identifies two broad categories, namely Primary Stakeholders (having a formal/official/contractual relationship with the organisation) and Secondary Stakeholders (indirectly affected by the activities of the organisation).

Developed from Stakeholder Theory, Corporate Citizenship (CC) endeavours to (Van Marrewijk, 2003:98):

*“...connect business activity to the broader social accountability and service for mutual benefit.”*

The organisation is thus a member of society, with rights and accompanying obligations to which it should be subservient (Waddell, 2000). CC is a view that impresses characteristics of a person upon the organisation.



“Person” does not imply a natural person, but rather a social construct. It implies legal personality, with the organisation being able to enter into legally binding contracts, negotiate, and be accountable for its actions. This translates into rights, obligations, and responsibilities to which the organisation needs to adhere.

## THE INFLUENCE OF CULTURE

People of different nationality may have different ideas about the conduct of organisations as members of society. Hofstede (Hofstede, 1991; Hofstede, 2001) provides a seminal understanding of national value differences within organisations, identifying four dimensions (Power distance, Individualism, Masculinity, and Uncertainty avoidance) along which values of employees in 53 different countries varied. Hofstede’s work suggests that countries that score similarly in terms of different dimensions could be grouped together in “country clusters” exhibiting similarities in terms of values (Hodgetts & Luthans, 1997). This does not mean that ethical principles along specific dimensions will be identical within these clusters, but the probability is high that ethical principles will overlap within these country clusters. Cultural differences in ethical principles in business necessitates an examination of whether these differences can be justified. This further fuels the debate between ethical relativism (different principles apply in different regions) and ethical universalism (a single set of principles, applicable to all). Somewhere between these poles resides Stakeholder Theory, which, recognises that different stakeholders have differing interests and are affected differently by decisions taken in the organisation. On the other hand, Stakeholder Theory also realises the necessity of satisfying the needs all stakeholders (Fisher & Lovell, 2009). This reminds strongly of the Rawlsian Difference Perspective (Rawls, 1971), which stipulates that inequalities should be arranged in such a way that they are reasonably expected to be to everyone’s advantage. Ethical standards can be tested against the Difference Principle, and if they do not benefit all stakeholders they are deemed inappropriate (Rawls, 1971). Therefore, Stakeholder Theory in its most stringent application should conform to the Difference Perspective.

## HYPOTHESES EMPLOYED

This paper considers whether students think organisations act in an ethical manner or not. Thus, one should consider the behaviour organisations exhibit towards their stakeholder groupings, as this is a manifestation of their ethical conduct. The decision was made to use stakeholder groups loosely based on the Strategic Stakeholder Grouping classification presented by Post, Preston and Sachs (2002). According to this classification, stakeholders are categorised into three groups based on their strategic environments, which provides the organisation with direction in terms of how to deal with different stakeholders:

- Core stakeholders: Vital to the existence of the organisation.
- Competitive Environment stakeholders: Define the company’s competitive position in an industry/market.
- External environmental stakeholders: Challenge the company to foresee/respond to developments as they arise.

For the purposes of this study, five stakeholder groups were used:

- The **Environment**, an external environmental stakeholder group (ENV);
- **Staff**, a core stakeholder group (STA);
- The **Community** at large, an external environmental stakeholder group (COM);
- **Regulatory** bodies, an external stakeholder group (REG), and
- **Competition**, a competitive environment stakeholder group (COM).

Shareholders have not been included, as it is implicit that organisations act responsibly toward shareholders.

With these groupings in mind, the study endeavours to test the following hypotheses:

- H1*: Organisations do not act in the best interests of the environment
- H2*: Organisations do not act in the best interests of staff
- H3*: Organisations do not act in the best interests of the broader community
- H4*: Organisations are not committed to being good corporate citizens
- H5*: Organisations do not compete fairly

## RESEARCH DESIGN

This study employed an exploratory, survey design to collect primary data. As mentioned, not much work has been done on how students view the ethical conduct of organisations. Consequently this study endeavours to deepen our understanding of this issue. The research population comprised business students at the University of Johannesburg (South Africa) and the Florida International University in Miami, USA. Final year and post-graduate students were used in this study, as they would have a better theoretical understanding of the issues under investigation, and secondly (most importantly) there is a greater probability that senior and post-graduate students will be employed, and therefore able to comment on their experiences of ethical conduct exhibited by business organisations. Non-probability sampling, in the form of a quota sample, was employed. A target of 250 respondents was decided on for each country, culminating in a combined target of 500 respondents. The study employed a customised measuring instrument that was developed by the authors. The items derived from literature and were measured on a 6 point Likert-scale. Student participation was voluntary and surveys were administered directly to lecture venues by student assistants. Data analysis included quantitative reliability tests, descriptive as well as inferential statistics. Cronbach-alpha reliability tests were performed on each construct to measure the internal reliability of the constructs employed. Descriptive statistics were compiled to assess the nature of the normal distributions of each construct. This would illustrate how commerce students perceived the ethical behaviour of business organisations – positive or negative – in terms of the identified constructs. Here, the mean value of each construct would be analysed against the median value of the measuring instrument. As the scale was coded from 1 = Always through to 6 = Never, the median value was 3.5. Therefore, 3.5 was an objective “midway” in determining whether opinion was negative or positive towards a given construct (lower than 3.5 would be positive and higher than 3.5 would be negative). To compare similarities between the SA and American datasets, independent samples t-tests were performed. Where statistically significant differences were encountered, the Effect Size was also calculated to provide an indication of the magnitude between the differences of the means in the two groups. Lastly, one sample t-tests were performed to test the presented hypotheses.

## **RESEARCH FINDINGS**

The South African survey (ZA) realised 258 survey questionnaires, of which 251 were usable. The American survey (US) rendered 343 usable questionnaires, yielding a total of 594 usable questionnaires. 72,5% of ZA respondents and 78,1% of US respondents were employed at the time of completing the questionnaire. This is crucial, as the respondents had working experience and could express valid opinions about the ethical behaviour of organisations. In terms of experience, 78,4% of ZA respondents and 97,1% of the US sample had work experience. Thus, the sample surveyed expressed valid opinions concerning the ethical conduct of organisations.

With the exception of “Ethical conduct in competition” (COP), the Cronbach’s Alpha values range between 0.62 and 0.79. This is satisfactory for exploratory research (Scheepers, Bloom & Hough, 2008; Nunally, 1978). As a result of alpha values of 0.32 and 0.21, the construct COP was discarded.

The South African opinion of the “Ethical conduct toward the environment” (ZA ENV), shows a mean value of 4.154, a 0.654 negative deviation from the measuring instrument mean of 3.5 (A “negative deviation” implies that the opinion of the respondents toward this construct was negative (albeit slightly)), therefore ZA respondents felt that organisations did not behave in the best interests of the environment. The US ENV mean value was 4.129, a 0.629 deviation to the negative. South African opinion of “Ethical conduct toward staff” (ZA STA) measured a mean of 3.475, a 0.025 deviation to the positive (“Positive deviation” implies that the opinion of the respondents toward this construct was positive (albeit very slightly)), thus ZA respondents felt that organisations do behave in the interests of staff. The US mean for this construct was 3.362, a positive deviation of 0.138. The ZA “Ethical conduct toward the community” (ZA COM) measured a mean value of 3.427, a 0.073 positive deviation. The US COM mean value was 3.535, a 0.035 negative deviation. “Ethical conduct toward regulators” for ZA (REG ZA mean was 3.651, representing a 0.151 negative deviation, whereas the US REG mean value was 3.662, a 0.162 negative deviation. COP was deemed internally unreliable and was discarded. All deviations are quite small (0.025 to 0.654) and can be seen to be neutral and meaningless. However, in this study, neutral opinion has meaning, as it represents something other than what organisations profess in terms of ethical conduct.

In the interests of brevity, the statistical analysis for this study can be summarised as follows:

**Table 1: Summary of statistical analysis**

Construct	Country	Reliable Construct?	Opinion	Statistically significant?	Effect size	Significant difference in means?
ENV	ZA	Yes	Negative	Yes	Moderate	No
	US	Yes	Negative	Yes	Moderate	
STA	ZA	Yes	Positive	No	Very small	No
	US	Yes	Positive	Yes	Small	
COM	ZA	Yes	Positive	No	Very small	No
	US	Yes	Negative	No	Very small	
REG	ZA	Yes	Negative	Yes	Small	No
	US	Yes	Negative	Yes	Small	
COP	ZA	No	N/A	N/A	N/A	N/A
	US	No	N/A	N/A	N/A	

The findings indicate that the following opinions are statistically significant:

- For ZA: Organisations do not act in the best interests of the environment or regulatory authorities.
- For US: Organisations do not act in the best interests of the environment, their staff, or the regulatory authority.

Also, the following opinions are meaningful from a practical point of view:

- For ZA: Organisations do not act in the best interests of the environment.
- For US: Organisations do not act in the best interests of the environment or of regulatory authorities.

In summary, it is evident that South Africans and Americans feel much the same about how organisations treat the environment (ENV), staff (STA), the community at large (COM) and regulatory bodies (REG). However, all statistically significant measures seem not to reject any of the stated hypotheses, although the effect sizes indicate that these measures are not always practically meaningful.

## CONCLUSION

The ethical conduct of South African organisations towards the physical environment and regulatory bodies are questioned by ZA respondents. They are seemingly mistrusting of the intentions of organisations to comply and serve the interests of the environment legally. These findings underscore the notion that organisations act in their own best interest. ZA findings also reveal that respondents have a more lenient view how organisations treat their staff and the community at large. However, these findings are not statistically insignificant, which does not mean that these findings are incorrect, but rather it cannot be proven that this sentiment is more than coincidence. American respondents share many of the sentiments of the South African respondents. They are also mistrusting of the intentions of organisations to comply and serve the interests of the environment, staff and regulators alike, thus further reinforcing the notion that organisations act in their own interest.

When comparing the mean scores for the two countries for the theoretical constructs, many similarities exist. In terms of how respondents viewed the behaviour of organisations towards the environment, staff, the greater community and regulatory authorities, no difference exists, indicating that South Africans and Americans agreed in their perception of irresponsible treatment of stakeholder groupings. Thus, American and South African opinion of the ethical intentions of organisations towards the identified constructs is virtually the same. This is surprising, as one would not expect opinions to be so similar between countries so far apart. This is contrary to the Country Cluster notion of Geert Hofstede (Luthans & Hodgetts, 1997), whereby practices (as well as the value systems that underlie them) from different cultures can be grouped together according to their spatial proximity. One can speculate that the dominance of American literature used in management courses in South Africa, as well as the dissemination of American popular culture across the globe could have an impact on this convergence of opinion.

## RECOMMENDATIONS AND MANAGERIAL IMPLICATIONS

This study highlights that there is a disconnect between what organisations profess to do in terms of ethical conduct toward different stakeholders, and how a sample of American and South African management students perceived these actions. In comparing American and South African opinion, it was evident that both groups felt the same about the identified aspects of the ethical behaviour (treatment of the environment, treatment of staff, treatment of the community and conduct toward regulatory bodies) of organisations. This suggests that ethical behaviour is perceived similarly by South African and American management students, but subtle differences do exist, and organisations should take cognisance of these differences when deciding upon ethically appropriate behaviour. A business could sustain itself by employing staff who are able to act morally and ethically. Managers must recognise and acknowledge the dignity and human rights of all stakeholders. It is necessary to formulate ethical codes so as to keep employees on a sound moral course and to maintain high ethical standards. Moral values cannot be disregarded as these drive honesty and make way for strong social inclusiveness. Staff needs a set of organisational values to guide their conduct and they should be involved in the formulation of these codes. Organisations should develop sustainable partnerships with their communities and honor their moral obligation to society, the environment and all other stakeholders, as moral behaviour entails looking beyond self-interest and focusing on the concerns of others.

Educators also have a role to play in ensuring that individuals with sound moral standards enter the workplace. Although difficult, business ethics should be integrated into management training syllabi and curricula. Students tend to adopt the attitude of their professional reference groups before they commence their professional careers and having business professionals as guest lecturers on the issue, more graduates of good moral and ethical standing could be nurtured. The similarities in opinion between the American and South African students testifies to issues people feels strongly about in terms of organisations ethical behaviour. The study shows that similar things are important in different areas. Ethics is not just about doing the right thing; it seems to be doing the right thing at the right time and in the right place, which is a perspective that leans toward ethical universalism. It must be borne in mind that there might be mitigating circumstances for the similarity in opinion that exists between South African and American respondents. As mentioned, this might be attributable to the dissemination of American cultural values via mass media or the Americanised approach to management education in South Africa. Although speculative, the fact of the matter is that opinion is similar between the US and ZA respondents, but this might not be the case for other countries. The study also indicates that respondents had a negative perception about ethical conduct of organisations in general. Organisations should highlight instances where the organisation has taken the moral high ground in their business dealings, which could be incorporated in the corporate marketing strategies of organisations.

## **LIMITATIONS AND AREAS FOR FUTURE RESEARCH**

A limitation of the study is that a student sample was drawn from one specific location per country. The findings are therefore not representative on a national level, but reflect only the views of those who participated in the study. On an exploratory level, the findings remain insightful. As the sample was drawn from students studying toward a business or management qualification, surveying respondents on a topic related to their field of study could lead to some level of response bias. Attitudes of other students could differ, but then again, students not in the field of business or management might not be familiar with business ethics at all. As an exploratory study, the measuring instrument needs refinement. The construct of ethical conduct in competition (COP) needs to be redesigned, indicative of the difficulty in measuring this concept, as it has different meanings for different people. As mentioned before, the similarity in opinion needs to be investigated further. It was not the intention to ascertain *why* opinion was similar or not, the objective was merely to see *if* opinion was similar or not. The speculative reasons reflected in this study should definitely be researched, as one would not expect opinion to be so similar between countries that are geographically and culturally separated. Also, the study needs to be taken wider, not only on a local level, but also on an international level. Collecting data from numerous countries could show the sentiment toward the ethical intentions of organisations in different parts of the world.

There is evidence to suggest that people in different parts of the world perceive the ethical conduct of organisations in a negative light. This does not bode well for organisations in an era when the role and function of the organisation in society has been seriously questioned. Rossouw and Van Vuuren (2006) quote six myths of business ethics, one being that the organisation pursues profit at all cost. Although exploratory, this research

suggests that these types of myths can perpetuate if organisations do not realise what their stakeholders actually think of them.

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# OPERATING DIALECTIC BETWEEN INFORMATION SEARCH AND FILTERING APPROACHES: A STATE OF THE ART

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## ABSTRACT

*This paper focuses on the state of the art of information filtering systems. It examines various filtering techniques discussed in the literature, primarily content-based filtering, collaborative filtering and hybrid filtering. It studies the different filtering algorithms used. The paper also introduces the concept of prediction in information filtering. It ends with a summary of the various existing approaches that valued the link between information filtering and improved personalized information search.*

**Keywords:** information retrieval, filtering approaches, collaborative filtering, filtering agent, information profiling.

## INTRODUCTION

This study is among the ongoing research on the contribution of filtering methods in improving information retrieval (IR) process and address deficiencies related to profiling users of an IR system. The amount of information on the Web and in information systems continues to grow by acquiring an increasingly complex semantics. Therefore, accurately locating the desired information on the Web has become a complex task because for a particular query submitted to a web search engine there will be many returns that go beyond the user's cognitive limitations, but proportional to the expansion of available content.

Therefore, it became necessary to propose approaches and tools to better target responses for each user, so that answers are closer to their expectations and wishes and which meet their cognitive profile. This has the advantage of meeting the criteria of ease of use or usability required for information systems [ 10 ] by allowing the user to be easily brought into contact with relevant information that meets their interests and personal need. In this context, information filtering system is proposed as an alternative for an appropriate solution to the problem.

A methodology with associated tools to filter information based on resources is necessary to bring all Internet-based resources to the cognitive dimension of the user; humanly enjoyable. In this regard, information filtering systems are examples of the solutions sought. In the literature , an information filtering system "conveys a document that is targeted to groups of people, based on their profiles in the long term" and "developed from learning data" [12] .Information filtering is the term used to describe a variety of processes related to providing adequate information to users who need it. [10] The term "filter" is often interpreted as the elimination of unwanted data on an incoming stream, rather than looking for specific data on the stream.

The purpose of this paper is to present a "state of the art" review on data and information filtering as well as highlighting various approaches to associated systems. This paper is organized around three major sections. The first presents a general introduction to the relationship between information systems and filtering systems. The second outlines the various approaches to filtering and the last presents our "information filtering approach versus personalized information search".

# STATE OF THE ART

An information retrieval system aims at "making available documents for users to satisfy their need for information" [10]. As for an information filtering system, it "brings documents to groups of people based on their profiles in the long term" [12] and it is "based on learning data". Access to relevant information is made through an information filtering system, against information retrieval tools that do not allow this systematic formulation or suitability to users' information needs [10]. The table below summarizes the differences between a filtering system and an information system:

**Table 1: information search vs information filtering [9]**

	Information systems	Filtering systems
Approach	Find searched information	Filter undesired information
Content analysis	Use key words (terms or multi-terms)	Analysis to content-based filtering and not collaborative filtering
Delivery	Static corpus upon request	Dynamic data flows
Functions	Impersonalized, passive, short-term, not adapted to changes	Personalized, filtering of incoming data and dynamic, long-term, adapted to changes in user profile
Persistence	Long-term needs	Long-term interests

## Information filtering

Information filtering is described as [1] a variety of processes aimed at providing information to people in line with their interests. Therefore, filtering is used to select relevant information from a large flow of information according to user profile. The major objectives of filtering are:

- Avoid information overload for users: filter allows selection of relevant information for user and this from a large data stream based on their profile.
- Find relevant information: filtering allows you to search relevant information to the user.
- Control access to information: filtering authorizes useful information by blocking unuseful information.

In this context, there are two filtering methods:

- Active filtering:

It enables you to search relevant information to the user. Indeed, using this technique, filtering explicitly collects user preferences and this through questionnaires, polls and comments made by the user on resources [14.6]. It is true that this technique seems simple; however, it has some drawbacks. First there is the strong user involvement in the process as they have to answer many questions in order to refine and personalize the content, which will affect usability of the information system. Take for example the field of tourism, the pioneers Triplehop of Trip Matcher [13], in which the user with a well-defined formalism expresses their needs, expectations and constraints, the approach then performs a correspondence between user preferences and catalogue objects that should be described with the formalism. - Passive filtering: This approach has overcome the problems of strong user involvement in filtering systems to collect explicit preferences. Passive filtering is used to select relevant information from a large flow of information according to user profile [7,2]: passive filtering approach models users through the analysis of their behavior given the information content made available. Amazon service is a good example. It directly identifies users' identities and recommends books that might interest them without being concerned with their needs.

## The different approaches to filtering:

There are three main types of information filtering systems [3]:

### Content-based filtering



It is the oldest filtering systems based on the information content of documents. It finds its roots in information search models. This technique also called thematic, cognitive or smart filtering is based on the content of documents (topics or items) to compare a profile generally consisting of themes addressed by the user. Indeed, content -based filtering compares the themes of documents with those the user wants. We may assume that each user has a profile that describes their interests. This profile may contain a list of topics that the user likes or not. [6]

This approach is similar to a query for information search operation. The user profile occupies the role of a search query to filter the documents in line with the needs of the user [9]. The major advantage of the content-based filtering system is the use of artificial intelligence techniques to improve filtering, update profile and couple profiles with documents. In other words, the user of such a system does not depend on other users, but they can benefit from recommendations of others even if they are only users registered and get little information on these topics .

However, content -based filtering has some limitations like cold start. Take the example of a user who finds it difficult to express these preferences or to define the themes for the system to calculate their profile. The funnel effect, which restricts users' range of vision, is constantly changing or restricted with the changing calculated user profiles.

### **Collaborative filtering**

The first collaborative filtering system is the Tapestry system [8] .Collaborative filtering attempts to overcome the shortcomings of content-based filtering, by making a community of users with similar profiles assess content.

Therefore, collaborative filtering assesses documents made by the user in order to recommend the same documents to other users without content analysis [ 8,13 ] More specifically, a collaborative filtering system is a process of exploration and exploitation of the correlations that exist between users or between items they enjoyed [7]. Thus, collaborative filtering mainly uses a matrix whose rows represent users and columns represent resources. Each cell in the matrix corresponds to the appropriate user rating of the resource. The effort is built on how to predict the ratings assigned by the user for each resource to recommend subsequently the best resources (or predicted score).

The general architecture of a collaborative filtering system has on two features:

- Calculation of the prediction of the evaluation of a document by the user and the calculation of similarities between users;
- The continuous updating of user profiles while collecting their feedback (or user data).

It is true that the collaborative filtering system has overcome the shortcomings of content -based filtering, as it has several advantages, mainly the fact that a user can use the documents already assessed and treated by other users in the system during their previous information search operations. This approach solves the problem of content-based filtering as it becomes possible to handle any type or form of data and disseminate information which is not similar to those already proposed.

However, people who have a infrequent taste or preference may well not receive proposals, since the system cannot filter data for them: a minimum of information is required on users (profile data) with data collected from their opinions (learning data).

This approach has also the limitation of a cold start [8], namely that a new user in the system starts with an empty profile and therefore the system must reconstruct it from missing data. This empty profile will go through a learning period before actually reflecting the user's preferences. Throughout the learning period, the system cannot effectively filter the profile and user data.

### **Hybrid filtering**

It is the combination of content-based filtering and collaborative filtering. Hybrid filtering tries to take advantage of all filtering approaches in combination. This approach aims at combining these approaches to

improve quality. Indeed, the resources will be directed to other users using collaborative filtering for profiles and content-based filtering for content [3, 4, 14].

In the literature, several hybridization approaches have been proposed and recommend customizing two or more ways in the same system [11]. However, the choice of types of hybridization is not made at random, it will depend on the area and information available (see Table 2).

**Table 2: Advantages and limitations of the different filtering approaches**

Filtering approaches	Advantages	Limitations
Content-based filtering	<ul style="list-style-type: none"> <li>- respond to users' interests in the long-term using efficient techniques of the field.</li> <li>- integrate semantics</li> </ul>	<ul style="list-style-type: none"> <li>-Difficulty in indexing multimedia documents (images, sounds ...).</li> <li>- Threshold Problem.</li> <li>- Not taking into account the criteria of relevance other than the theme namely scientific quality of content, reliability of information ...</li> <li>- Failure to take into account new themes</li> <li>- Funneling</li> <li>- Mass Effect</li> </ul>
Collaborative filtering	<ul style="list-style-type: none"> <li>- Simple.</li> <li>- apprehend all types of documents (text, images, sound ....)</li> <li>- does not filter documents rating new themes.</li> </ul>	<ul style="list-style-type: none"> <li>- Subjective</li> <li>- domain independent from existing information.</li> <li>- difficulty of quantifying performance criteria</li> <li>- Poor rating system.</li> </ul>
Hybrid filtering		- depends on relevant techniques.

The literature review allowed us to classify the different approaches with the corresponding references (see Table 3).

**Table 3: Tabulating approaches/references**

Approaches	References
Content-based filtering	[Pazzani, 99 ] [Balabanovic, 97] [Deshpande, 04] [mooney, 00]
Collaborative filtering	[Linden, 03] [Balabanovic, 97] [Goldberg, 92] [Herlocker, 99] [Resnick, 94] [Sarwar, 01]

The two main approaches to information filtering namely content -based filtering and collaborative filtering provided interesting results. On the one hand, collaborative filtering, based on the opinions of similar user groups, recommend some documents that have not yet been consulted. On the other hand, content -based filtering based on the thematic profile of the user evaluates whether a text or a document is important or not for the user. However, these two approaches seem important. Indeed, a hybrid approach combining user's opinions and tastes or thematic preferences, seems a relevant method to provide recommendations. It should be noted that filtering techniques do not take into account a number of information that explains judgments made by the user. This requires taking into account various sources of information about the user (preferences, interests, social environment, culture, personality traits, ...) and their correlations with or predictions of available documents. In what follows we will outline the concept of prediction and its various computational techniques.

# CALCULATING PREDICTION

Prediction is the estimated interest of a user for a document that has been recommended.

- Prediction in content-based filtering (or cognitive filtering): Predicting user opinion on a given document in cognitive filtering is estimated by calculating proximity between themes existing in user profile and those retained and indexed by the system.

- Prediction in Collaborative Filtering

In collaborative filtering, predicting user opinion is calculated by merging the old user ratings and various other community users (or group) of the same documents. Collaborative filtering based its analysis on the proximity between users in the goal of well recommending documents to users who have similar interests or similar [14]. The specificity of collaborative filtering lies in this merger, which led to the creation of user communities (or community groups) which is based on past assessments regardless of the content of documents.

## Techniques for calculating prediction

There are various prediction calculation techniques in collaborative filtering and can be classified into three categories:

- Memories-based Algorithms,
- Models-based Algorithms
- Machine learning-based Algorithms.

### Memories-based Algorithm

It is also called "user"- based algorithm [9]; these algorithms use all or part of user ratings database to calculate prediction. It can be inferred that these algorithms work on a database to calculate predictions. A user's rating of a document is calculated from the set of ratings or assessments of users (the closest) to the same document. The details of this calculation results in the use of various algorithms including the correlation- based algorithm that calculates weight as correlation between users and the vector similarity-based algorithm which calculates weight as a cosine between the vectors formed by user rating [9] .

### Models-based Algorithm

The purpose of models-based algorithm [ 14 ] is to use the user rating database to estimate which will be used to calculate predictions. The algorithm includes a descriptive model combining users, documents and ratings. From a probabilistic point of view [16], we assume that two models can be used to perform probabilistic calculations which are the clusters-based model and the Bayesian networks- based model.

### Machine learning algorithm

The online or machine learning algorithm uses a prediction agent for each user. Each agent must run a set of tests with a prediction at each stage [15.9]. Depending on other nearby agents that may have a similar account, neutral or opposed, the agent tries to reach users (or other agents). After introducing the concept of prediction and the various algorithms applied in the field of collaborative filtering , we will introduce the concept of documents evaluations to know whether the document presented to the user meets their needs or not .

## Documents Evaluations

The evaluation of a document or the judgment of a document can be done either explicitly in the form of a rating on a given scale e.g. 1 to 5 that a user assigns to a document or implicit where the system interprets a certain user account as evaluations [12,11]. For example, printing a document, downloading, filling out a form, reading documents are implicit acts where the system automatically processes them as evaluations. This method of collecting user preferences reduces the number of missing assessments and thus increases the quality of the prediction system.

Nowadays, research aims at introducing an intelligent agent to detect and determine the need for each user without physical intervention, i.e. implicitly determining from their actions on documents (printing,

downloading .... ) what interests the user and what does not interest them. In what follows, we will introduce the concept of intelligent filtering agents. C. Intelligent filtering agents Currently, research shifted attention towards "intelligent" or called "automatic" systems. An intelligent agent system is a system that takes decisions in a given situation without human intervention, i.e., the intelligent agent will act automatically without human downstream.

The current guidelines are aimed at integrating these agents in the field of information search and collaborative filtering:

- Agents construct their databases based on their observations of user behavior and thus they act following a search equation performed by the user,
- The agent performs its selection of documents that match user query , it classifies documents according to a relevance order and then presents them to the user.
- The agent observes the user account in order to adjust its search equation then decides whether or not to send them a list of profiled material [ 7] .

## SUMMARY OF FILTERING APPROACHES

There are a number of FILTERING models that are based on information retrieval and a decision function given the duality between information retrieval and information filtering.

This duality is reflected in the following facts:

- An information retrieval system requires the existence of a collection of documents while the filtering system of user data is based on a set of profiles.
- Information search, the interaction between user and the document during a search period is unique while in information filtering the user has the possibility to make several changes during several research sessions and in the long term.
- An information retrieval system manages static documents while information filtering receives documents from a dynamic data flow.
- An information retrieval system simulates a less active process given that users consult the filtered documents periodically while a filtering system adapts its interaction with the user and is based on the judgments of the results, consultation of information search results (topics, items, content type, etc. . , and combinations thereof) .
- An information filtering system decides on the relevance or not of a document while the information filtering system provides a list of documents ordered by relevance according to the user profile.

This duality between the two systems makes it possible for the existence of a link between them and the information filtering system is there to improve and address the research gaps of non-personalized information. In a sense, the filtering system aims at accessing profiled information. That is why the filtering system should know the user through the description of the profile or their actions and should be kept up to date to reflect current interests and thus improve the results of information retrieval upon querying. Work on information filtering showed a clear trend in recent years. Efforts were to assist and facilitate navigation of users facing a significant amount of information and data [18]. Several are information filtering techniques that are based on users' interests and the amount of information available on the web. Some authors [18 ], [ 19 ] propose simple applications easy to implement, and technically robust. Others offer more advanced information filtering techniques related to news [20] .

Work on collaborative filtering is increasing and have increased lately thanks to efficient algorithms based on various [21] applications. Initially, the methods were static while a number of researchers have formulated the filter as a learning problem. [22] We have identified two main types of collaborative filtering algorithms:

- Memory-based Algorithms and
- Models-based Algorithms [22].

Practically, the various methods used are based on various techniques from Markov Models, Neural Networks, and Bayesian Networks.

Recently, considerable development in work on adaptive interfaces has been observed. For example, in the field of online help, all interfaces are designed to know the current user or the activity thereof using "Smart

Menus" introduced by Microsoft in Windows 2000 and this through identifying user intentions or preferences and interests [22] .

However, there is no scalable user model that takes into account both information available on individual behavior and expectations, and those concerning the behavior and expectations of the class to which the user belongs .Almost all proposed filtering techniques involve a situation of implicit interaction in which the user takes the initiative to find the information of interest. In various approaches to observed information filtering, users receive documents that their system recommends based on their profile or community. Moreover, user profile and communities evolve over time through interactions between the user and the system associated with the user-generated assessments. Therefore, the system cannot provide relevant recommendations given the problem of the dynamics of changes in real time ( a user working in the system ) or cold start ( a new user in the system ) .

## CONCLUSION

Information search and information filtering (of content and / or user profiling) is to design, model and implement systems for the processing of information flows as they stream in order to select and present relevant documents. However, information search and filtering are strongly linked together to complete the treatment chain with relevant documents and user preferences.

In this study, information retrieval has been observed to include three main functions, namely: Organizing and indexing content (collection of documents) , (ii) user query and its intrinsic preferences, and the method used to compare between content indexing and user query combining their preferences. In information filtering, the complexity lies in the association that handles incoming content, integrated profiles that are embedded in the query, and the method used to make the connection between documents and profiles. In current research, this approximation is based on conventional techniques used in information retrieval. Therefore, the information filtering to be associated is closely linked to the concept of user during an information search activity. While improving the methods and nature of the proposed results, meeting their needs (in terms of information) and expectations (in terms of satisfaction with the preferences), there remains a complex issue to be resolved.

Intrinsically, information filtering is an area of growing research to improve the extraction of incoming data streams and information useful for the user account. User modeling is therefore the focal point for an adaptive and personalized access to information. In order to make this access effective and relevant, the system should know the user through the description of their profile and should evolve with their activities to reflect the current interest as well as changes in preferences. There are problems to be solved and a number of constraints that are related to taking into account data in information retrieval system. Contextualization is well observed in the dynamics of user preferences.

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# **A TUNISIAN PIONEER ISLAMIC BANK: A CASE STUDY OF THE QUALITY OF THE WEBSITE**

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## **ABSTRACT**

*Islamic banking system has been expanding so rapidly over the three past decades. In addition, it has been developing significantly around the world including MENA region countries, Southeast Asian countries, European countries and even in North American countries. In Tunisia we have the first Islamic bank off shore in 1986 and the first Tunisian Islamic bank in 2008 for residents. In the era of information of technology any organization needs to be present in the internet in an attractive and efficient way. The website when it is properly utilized added a real value tool to improve customer relationship, to prospect potential customers and reduce costs for some transactions. The majority of the websites of conventional banks are similar. In this paper we try to evaluate the quality of a website of a Tunisian pioneer Islamic bank Zitouna (onshore) according to Diniz (1998) model and we compare it also to another Tunisian Islamic bank El Baraka. This paper attempts to present an overview of Islamic finance in Tunisia*

**Keywords:** pioneer Islamic bank, quality website, customer relationships, informational, transactional.

## **INTRODUCTION**

The Islamic finance is based on the adoption of Sharia (Islam laws) principles. These include in particular the prohibition of Riba, gharar (ambiguity) and maysir (speculation). The interference in the operations of third parties, trade items prohibited by Shariah, hoarding or leveraging adverse circumstances a person is also prohibited. These rules consider honesty, fair business practices, selling on public procurement, the need to reveal defects in the form or the prohibition against the goods offered under a false light requirements are equal importance.

In Tunisia, the first Islamic bank : Zitouna Bank is established in October 2009, it is a commercial bank, which obeys to the laws governing banking in Tunisia. In 28 May 2010, Zitouna Bank began its activities in providing individuals, professionals companies with an innovative range of products and services in accordance with the principles of Islamic finance. It offers a wide range of products and services in deposit accounts, financing, participatory investment, electronic banking and bank remotely. To assist companies in the daily cash management, Zitouna Bank offers financing solutions operating cycles and investment and designs innovative practices in processing foreign trade operations.

A website is considered as a showroom for potential customers and a place of transactions and information for the bank's customers. Especially in Islamic banking which is a new trend of finance for Tunisian people. We need to know about products, services, locations of agencies.... In other words Islamic bank have to consider website as an important tool to prospect potential customers. Unfortunately, the most banks do not really take in consideration the perception of the users of their websites and their conception was made by specialized companies. Sometimes they neglect the aspects of design, convenience, contents and other important

essentials. Banks can no longer depend on their physical presence but also have to introduce website Internet banking has been reported as the most important innovation for banking services deployment of the last years (Diniz, Porto, & Adaci, 2005).The object of this paper is to examine and evaluate a website of zitouna bank which is a pioneer Islamic bank according to Diniz model 1998 and compare it also to El Baraka bank.

## METHODOLOGY

In this study we adopt Diniz model (1998) as a Check list to evaluate the website of a pioneer Islamic Tunisian bank: Zitouna and compare it to Al Baraka Bank. We attribute the mark 1 when the element of the model is present in the website and the mark 0 if it is absent. The Diniz models 1998 consider that the website of a bank is composed of three levels of activities: informational, transactional and development of customer relationship. Each activity is divided to three levels: basic, intermediary and advanced.

**Table 1: framework of Diniz model 1998**

	Basic (incremental)	Intermediary (improvement)	Advanced (transformation)
Information delivery	<ul style="list-style-type: none"> <li>• electronic brochure</li> <li>• institutional</li> <li>• promotional</li> <li>• contact</li> <li>• offers</li> </ul>	<ul style="list-style-type: none"> <li>• search engine</li> <li>• report download</li> <li>• recruitment forms</li> <li>• hot links</li> </ul>	<ul style="list-style-type: none"> <li>• customize</li> <li>• subscription</li> <li>• advertisement</li> <li>• discussion groups</li> </ul>
transaction	<ul style="list-style-type: none"> <li>• open account</li> <li>• product and service request</li> <li>• investment and credit application</li> </ul>	<ul style="list-style-type: none"> <li>• balance</li> <li>• statement</li> <li>• fund transfer</li> <li>• bill payment</li> </ul>	<ul style="list-style-type: none"> <li>• non-branch bank</li> <li>• banking by service</li> </ul>
Customer relationships	<ul style="list-style-type: none"> <li>• e-mail</li> <li>• suggestion forms</li> </ul>	<ul style="list-style-type: none"> <li>• calculator</li> <li>• investment advisor</li> <li>• software download</li> </ul>	<ul style="list-style-type: none"> <li>• product and service development</li> <li>• videoconference</li> </ul>

## CASE STUDY ANALYSIS

As shown in Table 2, basic information is present in both web sites: detailed institutional information, promotional information and branch locations. Both banks also supply facts about their board of directors, contact details and information on special events.

**Table 2: Informational evaluation**

Information delivery	zitouna bank	Al Baraka Bank
Basic :		
•electronic brochure	0	0
• institutional	1	1
• promotional	1	1
• contact	1	1
• offers	1	1
Intermediary		
•search engine	1	1
• report download	0	1
• recruitment forms	1	1
• hot links	0	0



Advanced		
•customize	0	0
• subscription	1	1
• advertisement	1	1
• discussion groups	0	0

In the advanced level of informational activity, Zitouna bank has a page Facebook but it is not indicated on the website by a link. The Islamic Bank should make more effort to explain their products (not by a classic way just giving definitions of their products) but by using inventive ways that the internet offer.

**Table 3: Transactional evaluation**

transaction	Zitouna Bank	Al Baraka Bank
Basic :		
• open account	1	1
• product and service request	1	1
• investment and credit application	1	1
Intermediary		
• balance	1	1
• statement	1	1
• fund transfer	1	1
• bill payment	1	1
Advanced		
• non-branch bank	0	0
• banking by service	0	0

At the intermediary level, the same two banks provided fund transfer, balance inquiry, and history of client account service.

**Table 4: Evaluation of the development of customer relationships**

Development of customer relationship	Zitouna Bank	El Baraka Bank
Basic :		
• e-mail	1	1
• suggestion forms	1	1
Intermediary		
• calculator	1	1
• investment advisor	1	1
• software download	1	1
Advanced		
• product and service development	0	0
• videoconference	0	0

We notice that in the basic and intermediary level of the development of customer relationships, the both websites dispose of these elements. The more important it's how to respond to the e mail and how long it takes? Even for the suggestions, how are they treated? The advanced level is absent for both websites.

## DISCUSSION

It is clear that the gap between Islamic Tunisian bank web applications and American bank web application is significant. According to the model of Diniz (1998), the elements of basic and intermediary levels of the activities: informational, transactional and the development of customer relationships is present for the website of zitouna bank but not those advanced ones.

Kurtas (2000) found that American banks use their web sites not only to provide classical operations such as fund transfer or account details, but to also to provide stock trading in the world markets, financial calculators, investment advice, and bill payments. In Tunisia, we use internet for information and communication purposes than for transactions. We need a strategy and major measures to encourage customers to use more often internet for transactions.

## CONCLUSION

The bank website provides direct marketing opportunities and a competitive position for the banks. Islamic or conventional banks have to be aware of the importance of this tool. In Tunisia most people still ignore or misunderstood Islamic banking so the internet offer a great opportunity to explain for potential customers the principles and the products offered by Islamic banks in an easy and simple way . Future research should focus on the measure of perception of the quality of the websites of the Islamic banks in Tunisia. Even the design analysis and content analysis of the website allow marketers to improve them and to be more competitive.

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# **NEW CONCEPT OF THE COMPANY : SEACIRCLE BUSINESS**

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## **ABSTRACT**

*Development of capitalism with the development of natural science has been changing and evolving according to the trend of the times. Most of these capitalist Companies played a central role in the ecosystem of capitalism but made serious problems such as environment degradation or the polarization of wealth by the reckless pursuit of profit. For this alternatives, share value, creative capitalism and social companies has been mentioned. This paper suggests new concept of the company called SeaCircle Company which emphasis on spiritual value rather than the value of the company profit. This paper explains the changes of the company form and introduces the concept of SeaCircle and suggests the concept of SeaCircle Company for co-existence and prosperity of mankind.*

*Keywords:* SeaCircle, Company, Business, Capitalism, Human resources, Open mind, Spirit

## **INTRODUCTION**

Culture can be said to be the foundation of life. However, current culture of life is decreasing people's happiness due to the excessive pursuit of materials, life neglect and environmental degradation. Culture itself should be the life with breathing spirit to make people happy. SeaCircle is the new name of culture which regards life and spirituality as important elements.

In this paper, we apply SeaCircle to the economic area and would like to explain the new concept of the company form and business. Capitalism is regarded as a part of the culture so new capitalism can arise in new culture. We would like to describe the current capitalism and its company forms and introduce new culture named SeaCircle and then suggest SeaCircle business and company which is applied to economic area.

## **DEVELOPMENT OF CAPITALISM**

From the mid-16<sup>th</sup> century, capitalism began to generate in feudalism society. Feudalism society has subordinate relations by a person of standing position but capitalism society is based on the people's free contact. Capitalism is the private ownership of capital managed by political, social, and economic systems. This capitalism gradually developed in UK and France from the mid-18th century and was established by the Industrial Revolution.

The important assets of company are changed by age, from commerce, industry, technology, information and knowledge and to the cultural values. Thus, to enjoy physically or spiritually developed goods and service with the development of the capitalist makes our life more happy and live in comfortable environments. And we already know that Adam Smith's 'invisible hand' that is now malfunctioning in these days.

## **ADVENT OF SPIRITUALITY**

How to purify the dysfunction of capitalism? David Hawkins who explains human spirituality in modern science insists spiritual neoanthropinae beyond Homo sapience. What he says about neoanthropinae is waking human being who evolves from body to spirituality, shape to non-shape, and linearity to non-linearity. He spoke that "The energy level of the entire human race is increasingly evolving towards a spiritual reality, spiritual values are now appearing within the corporate culture intact." presenting scientific evidences (David Hawkins, 2007) . Proving his insists of waking human being, spirituality is used for the concept of the development of company management and production. The company introduces SQ(Spiritual quotient) beyond IQ(Intelligent quotient) EQ(Emotional quotient)(Steven Covey, 2005).

After all, the problems of man-made capital can be solved again by a person. In the changes of the assets of company, we would like to set up the spiritual assets as the next step of the cultural assets. In this paper, we would like to solve problems by the awareness of the human beings which we did not know well about human in past.

## **NEW CONCEPT OF CULTURE: SEACIRCLE**

In these days of the development of material civilization, polarization, ecological degradation, environment pollution and the disregard of life, human dignity and the spiritual values are importantly demanded. In the requirements and recognition for the era, we propose the concept of SeaCircle to avoid static thoughts and to create new civilization and culture. The concept of SeaCircle is first appeared in September 2, 2002 and presented in paper as the title of "The study of the new concept of the culture" in November 11, 2004. In this paper, we apply the concept of SeaCircle to business.

### **The Definition of SeaCircle**

SeaCircle is the cultural term involved the character and the symbol of sea, which means creativity, life, equality, receptivity, equality and self-purification and the character of circle, which means circulation. We summarized SeaCircle as three elements which are SeaCircle, Open Mind and Spirit (Jeongsuk Oh & Hochang Youn., 2004).

### **SeaCircle**

The origin of the life is in water and the sea is the pregnant mother carrying a new life. Through the bubble of the sea, life is created. Each bubble is a macrocosm and life is in there. The bubble in circle represents life and creativity. The meaning of circle is circumference, orbit, circulation and cycle that SeaCircle is the term to keep life by self-purification and represent rotation and life-characteristics. In short, SeaCircle represents the birth and maintain of life and its circulation.

### **Open Mind**

Sea receives water, dirt and all kinds of things poured by earth and mix them by circulation of atmosphere and convective circulation. This means it admit me and other existing and harmony with each other. Water flows down and makes horizontal forms. This is also an open, horizontal thought, and broad-mindedness. This broad-mindedness brings harmony, fusion and creativity.

### **Spirit**

Spirit symbolizes self-cleaning and purification ability of the salt, which keep the nature of sea perennially. Sea can receive objects that can cause pollution with no-selectivity but it has the ability to keep the essence with salt ingredient and the structure of circulation. Spirit as the matrix of culture evolution can be understood as the concept for keeping life in big circle of culture. Space is the matrix of sea and space is the holy domain. This can describe that spirit has the characteristics to keep holiness.

### **Compare SeaCircle and Culture**

The compare of existing culture and SeaCircle is as below table.

**Table 1 : Compare to existing culture** (Hochang Youn , 2003)

Category	Culture	SeaCircle
Symbol	Maintain	Generate
	↑	↑
Purpose	Life	Life
	↑	↑
Behavior	Cultivate	Create
	↑	↑
Origin	Land	Sea

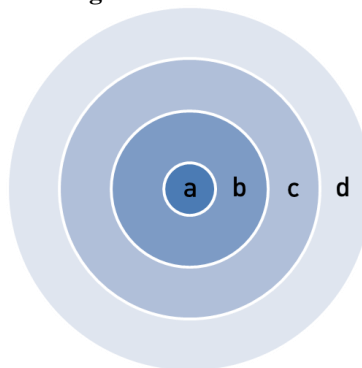
The existing concept of culture was for living on the other hand SeaCircle is the concept of production and includes the concept for keeping life.

## SEACIRCLE FOR ECONOMIC FIELD: SEACIRCLE BUSINESS

### Concept of SeaCircle Company

SeaCircle Company starts from the proposition that human is spiritual being. Astral body has a dignity because of their divinity. SeaCircle Company consists of these people and makes the spiritual value to the asset value of the company and spiritual value is placed on the top of the capital values. Therefore, for the company employees' happiness, self-realization of individuals and purpose of companies have to match each other. SeaCircle Company applies Open Mind and Spirit to the goods and service and makes background to incur creativity. On this foundation, company members are nurtured carefully to the goods and services to add spirit that is alive.

#### Implicated element of goods or services in SeaCircle Company



<b>a</b>	Product, Service
<b>b</b>	Heartfelt
<b>c</b>	Open Mind × Spirit
<b>d</b>	Individual Mission + Company Mission

The value of SeaCircle Company is on spiritual assets. The spiritual assets of the company are increased by the efforts to perform mission and coincidence of its mission to the company.

SeaCircle Times published on September, 2011 explained about SeaCircle Company. SeaCircle Company is that live spirit dwells in its goods and service.

SeaCircle applied in Business with three elements of SeaCircle : SeaCircle, Open Mind and Spirit. It is as follows.

**Table 2: Application of a SeaCircle company with SeaCircle elements**

SeaCircle element	Meaning	Application of a SeaCircle company
SeaCircle	Life	Acknowledgement of myself and other person's dignity for the spiritual being
	Creativity	Development of new valuable assets; product, service and abilities according with mission
Open Mind	Equality	Respect to each other in business ecosystem
	Openness	Open thoughts and communication to admit each others
Spirit	Spirituality	Awakening endless evolved and developed spiritual beings
	Purification	To live in happy after awakening the purpose of life

## The Purpose of SeaCircle Company

The purpose of SeaCircle Company can be described with inward purpose and public purpose.

### Inward Purpose

The members of the company conduct business in accordance with the mission to achieve self-realization and get the best job satisfaction. The company set up required jobs which are necessary for the mission of company and operate them to meet member's mission and try to get the best job satisfactions.

### Public Purpose

Public purpose of SeaCircle company is to form SeaCircle company culture, lead to a virtuous cycle of the ecosystem and contribute to co-existence and prosperity to humankind.

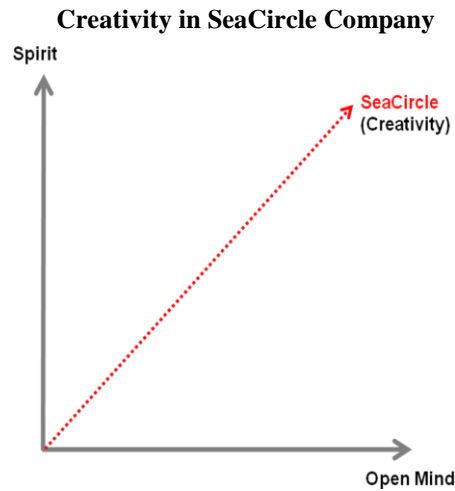
## SeaCircle Company and Creativity

SeaCircle company pursues the spiritual assets rather than profit-seeking. These companies can produce the goods taking full advantage of members' spirits in order to growth. How members' spirituality can be demonstrated? Spirit can arise in deep consciousness and awaken thought. When members conduct business with a deep understanding and thinking process then creative results come out. This creativity added products can have high values that make high returns with a small amount of works. Creativity can be made out by respect for human, caring, happy, joyous minds when conduct business. The creativity in SeaCircle is expressed to the elements of Open mind and Spirit. Open mind means openness, transparency, adaptiveness, broad-thoughts, applicability and immersion. By the level of spirit, spirituality and inspiration, the creativity level is determined.

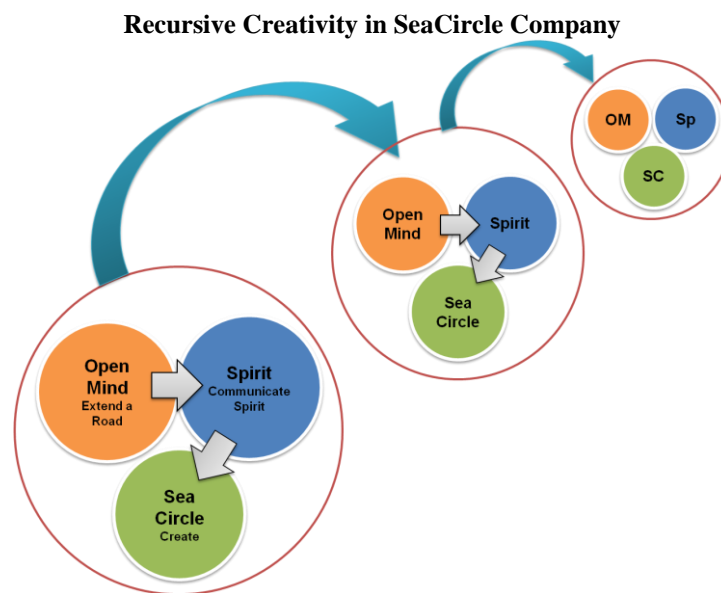
## Realization of SeaCircle Company

A SeaCircle company to communicate spirit must realize creativity and share spiritual value between company and members of it.

Premise and methodology to form SeaCircle Company is as follows.



The result of creativity evolves by the feedback in the process.



## Premise of SeaCircle Company

All living things are with each spirit.

We recognize that the Company is a living being in a SeaCircle Company

A living being have the reason and mission of existence.

If A being do its mission, it can get creativity and perpetuality

## METHODOLOGY

### Discipline for a change of recognition

Firstly, members of a company must learn to recognize that company is a spiritual thing

If there is not the above discipline, members of company can't know the value of company's existence and they can't communicate each other.

But if company and its members commune with spiritual value, members can realize the value of company.

## **Finding Mission through SA method**

Because a SeaCircle company lives, we can say that company have mission as reason of existence on the premise.

Members can try for the company to do its mission if they know its mission. There is SA method to find this mission

## **SA Methodology**

SA means a Self Analysis, a Self Ask and Essay. SA method uses. when we try to find our mission through an objective analysis of ourselves and self asking.

If we know our mission through this method, we can know mission of small organization, company, society, nation and universe.

## **CONCLUSION**

If the number of SeaCircle Companies increases, an ecosystem for SeaCircle business will form. This ecosystem will overcome the side effect of capitalism through the virtuous circle of SeaCircle. It will be the alternatives to solves problems of modern capitalism and make foundation for future society which need the value of spirituality.

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# **A STUDY ON EFFECTIVE MEASURES FOR THE DEVELOPMENT OF INTERNATIONAL TOURISM IN KOREA AND JAPAN**

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## **ABSTRACT**

*Over years, the relationship between South Korea and Japan is fluctuating, sometimes amicable and sometimes opposing, due to political problems. On the other hand, both countries are seeking for a complementary relation in view of international tourism. The present paper aims to extract primary problems of both countries in comparing their inbound strategies by citing articles of the "TRAVEL JOURNAL"(2013, April.1) with the aim of finding actually implementable measures for comprehensively and systematically promoting programs related to actualization of a tourism nation, to achieve national economic developments and to ensure the general well-being of people in view of the current circumferential changes in these years.*

Keywords: International Tourism、Inbound Strategy、Promotion、Group Tour、Repeat Visitors

## **INTRODUCTION**

Over years, the relation between Korea and Japan is repeatedly fluctuating, sometimes amicable and sometimes opposing, while no clues have yet been found to clear up the pending political problems between both countries (for instance, territorial rights, comfort women issues during the war, and controversies over school textbooks). Yet, both countries are seeking for a complementary relation in view of international tourism beyond such political problems for achieving mutual co-existence in a peaceful way.

The development of international tourism of both countries as major countries of East Asia is a national issue that is essential for the development of an economic society in the 21 century. It is accordingly necessary for both countries to promote tourism as a national matter. Due to the necessity of promoting programs for actualizing a tourism nation, the Japanese cabinet has approved "Tourism Nation Promotion Basic Plans" which are now being promoted.

In the Republic of Korea (hereinafter referred to as "Korea"), the national tourism organization (Korea Tourism Organization) takes a leading part and invests, in addition to government budgets, its internal revenue sources obtained as earnings of the Korea Tourism Organization Duty-free shops (which comprise the largest duty-free network in Korea) and casino-running subsidiaries in marketing for attracting foreign tourists. Its business area extends beyond attraction of foreign tourists up to improvements in domestic tourism infrastructure and promotion of tourism, and it leads the development of tourism in direct connection with target strategies.

Both Korea and Japan are the largest senders of tourists to each other and spreading effects of international tourism become increasingly larger for both countries.

For realizing tourist nations in both countries, it is necessary to clarify organizations that are responsible for tourist administration and to establish a system with which it is possible to accomplish business in a

functional and effective manner. In establishing such a system, it is considered that the relationship becomes organic when both countries could establish a common consulting organization instead of having their own ones.

In order to break deadlock situations of depopulation or decreasing birthrate and aging population and to revitalize both countries by capturing demands of tourists from rapidly developing Asian countries despite a long lasting economic slump with provinces impoverishing, it is necessary to construct a tourism style based on recovering and boosting demands for international tourism and by utilizing abundant resources of provinces as one strategic field.

Moreover, in view of the circumferential changes in these years, the necessity of actually implementable measures is gradually surfacing for comprehensively and systematically promoting programs related to actualization of a tourism nation, to achieve national economic developments, and to ensure the general well-being of people. This is also of significance for changing minds of people with respect to the tourist industry. The present study will be made with the aim of extracting primary problems of Korea and Japan by comparing inbound strategies of both countries with the aid of the recognition of “development of an international tourism promotion model” for the co-existence of international tourism in both countries through a mutually complementing relationship.

## **COMPARISON OF INBOUND STRATEGIES OF KOREA AND JAPAN**

### **Promotion in Japan**

It is necessary to show uniqueness for seizing attention of foreign consumers under the current situation of intensification of international competition among competing countries which common growing sectors are the tourist industry.

Targets of seriously starting new style promotion for attraction are individual travelers who are sensitive to media such as the Internet or SNSs. Numerical results clearly show the growth of individual travelers<sup>1</sup>. The Japan Tourism Agency has made a drastic change to overseas promotion after the 10th anniversary of the Visit Japan Project in April 2013, and has started promotion in linkage with SNSs with the expectations of effects of word-of-mouth.

The slogan directed to overseas travelers has changed from “Visit Japan” to “Discover Japan”, and the renewed website offers more than 160 videos of tourist attractions of the whole country focusing on the three themes of “Character of the Japanese”, “Selected Creations of Japan” and “Delights in Life of the Japanese People” for promoting development of unknown aspects of Japan<sup>2</sup>.

### **Promotion in Korea**

Korea uses Korean artists and athletes who are well-known with a focus on Asia in tourist strategies. Famous artists were employed as Goodwill Ambassadors for the “Visit Korea Year” promoted for three years from 2010 to 2012 and for advertisements of the “2013 Korea Grand Sale”, a shopping program for foreign tourists. Korea also directed splendor by inviting foreign tourists to concerts of Korean artists to increase opportunities of exposure to the mass media.

Promotions based on Korean culture that previously focused on idols have spread to other fields such as singers starting last year. The presence of satisfactory overseas networks is inevitable for actively promoting Korea. The Korea Tourism Organization has 31 overseas offices in Europe, the US, Asia-Pacific and Middle East, and expanding strategies are apparent from the fact that 19 thereof are located in Asia. There are 5 offices in Japan, namely in Tokyo, Osaka, Fukuoka, Nagoya and Sendai in addition to Guangzhou and Shenyang offices in China and in Kuala Lumpur, Jakarta, Hanoi and Manila in southeast Asia whereas the Japan Tourism Agency has no offices in these cities.

## Shopping Strategies in Japan

While it had been mostly left to individual operators and regions to attract foreign tourists so far<sup>3</sup>, Japan is now starting to get down to this task seriously. One example thereof is the “Meet the New JAPAN Campaign 2013” which the Japan Tourism Agency carried out from December 2013 to March 2013 as a Visit Japan Project. The Japan Tourism Agency started the “Visit Japan Plus Activities” in August 2011, the year of the Great East Japan earthquake, in cooperation with enterprises of various fields other than those of the conventional tourist industry, and the “Liaison Council of Public and Private Sectors for Promoting Foreign Tourists to Japan” has been established as a framework for supporting such activities.

During this campaign, foreign tourists to Japan could enjoy benefits such as discount rates, gifts (original items) and plus one dishes by showing passports at more than 10,000 facilities including department stores, shops, hotels, restaurants and sightseeing spots. The scheme of targeting on East Asian women in their twenties and thirties in linkage with events such as costume plays and fashion experiences representing Cool Japan resembles that of the Korea Grand Sales of Korea that aims for differentiation through Korean culture events.

## Shopping Strategies in Korea

The Korean government developed various incentive programs while intensively investing money therein during the “Visit Korea Year”, the three-year strategy from 2010 to 2012, and the programs proved motive powers that lead to increases in foreign tourists to Korea.

The Korea Tourism Organization proposed six benefits to foreign tourists who visited Korea during the Visit Korea Year. More particularly, with benefits of (1) “Korea Grand Sale” providing discounts at more than 20,000 retail shops and tourist facilities focusing on tourist spots such as Seoul, Busan and Jeju Island, (2) “One More Night” offering one free stay when tourists stayed for three or four nights or more, (3) “coupon service” offering discounts and benefits at facilities such as cosmetic shops, cafes and the Korean Folk Village, (4) “free shuttle buses” supporting local trips, (5) “benefits of train trips” offering a maximum discount of 30% of fares for riding the Korea Train Express KTX, and (6) “welcome kit distribution” to visitors during promotion periods in summer and winter, the government aimed to increase the amount of tourist consumption through shopping and to promote local tourism. The most special feature of scale was the Korea Grand Sale for attracting individual tourists. This program continued for 52 days from January 9 to February 29, 2012, focusing on the two biggest markets of China and Japan, and promotions were made using portal sites such as “163.com” operated by NetEase.com, Inc. and “QQ.com by Tencent, Inc. in China and major newspaper companies in Japan.

The Korea Grand Sale was also held also after expiry of the Visit Korea Year in a maximum scale by 85 companies and approximately 24,700 shops during January 11 to February 28, 2013 (including the Chinese New Year period), and foreign tourists could enjoy various shopping benefits including discounts of 10 to 70%.

There are other large-scaled campaigns in Hong Kong and other Asian countries in which half off sales are not uncommon. Korea accordingly aims to achieve differentiation through unique events in connection with Korean cultural contents for increasing its competitiveness<sup>4</sup>.

## Strategies of Japan Cooperating with Korean Travel Agents

A large problem that is common to both of Korea and Japan is the development of local tourism. There are large differences in popularity and interests in programs for attracting tourists among regions in Japan. The presence/absence of airlines largely affects solicitation of tourists particularly from Korea, China and Taiwan. Travel agents that actually plan various travels to Japan say that developments in products covering large areas with needs do not progress since respective municipalities perform “top-level” sales cooperate with travel agents and the mass media individually. In 2013, both countries enjoyed new developments in local tourism. The Japan Tourism Agency and the Korean Ministry of Sports, Culture and Tourism have set a target of 7 million exchange population between both countries for the year 2013 during the 27th Tourism Promotion Meeting held in Hakodate in October 2012, confirmed the importance of expanding local tourism for the increase in exchange

population, and agreed to define 2013 as the “First Year of Local Tourism Exchange between Korea and Japan”. They created a common logo/visual in cooperation, permitted usage of such logos on products satisfying certain standards, and work on setting up corners of sister cities, holding interactive events and promoting exhibitions of local authorities during events such as Trip Expos.

The Japan Tourism Agency worked out the “Japanese-Korean Local Tourism Interaction Promoting Plan” in conjunction therewith, and it has been specified to activate local tourism by creating new travel commodities, enhancing dissemination of local information and promoting interactions focusing on the three themes of “events” such as festivals, “sports” such as marathons, golfing and trekking and “hot springs”.

In developing travel commodities, the Japan National Tourist Organization and Local Transportation Bureaus are cooperating in inviting Korean travel agents primarily to immediately commercializable local regions and are supporting creation and sales of products, as a part of the Visit Japan Project, incorporating local festivals, cultures, education and sports events, products with origins/destinations in local service cities of direct flights between Korea and Japan, excursion tour products in local cities and products offering stays in local cities. Activation of such cooperative programs between both countries, which are mutually the major senders of foreign tourists, will be fruitful in achieving expansions in exchange population.

However, despite any progresses in agreements between the two countries, it will be impossible to solve the current problems without motivating travel agents who are the actual creators of travel plans.

## **Strategies of Korea Cooperating with Japanese Travel Agents**

The Korea Tourism Organization is actively developing markets together with Japanese travel agents and products by providing assistance of a part of costs necessary for creating travel commodities for Japanese tourists visiting Korea. It is characteristic of the cooperative relationship between the Korea Tourism Organization and Japanese travel agents that increases in the amount of tourists and spreading of target strategies are achieved by creating close relationships with particular travel agents. The Korea Tourism Organization has concluded annual joint business promoting agreements with major Japanese travel agents such as JTB, Kinki Nippon Tourist or Nippon Travel Agency in developing plans for intensively sending tourists to large-scaled events of the year and in promoting marketing of new plans. In 2013, the Korea Tourism Organization has concluded joint business promoting agreements with Rakuten Travel and Meitetsu World Travel with the aim of increasing the number of Japanese tourists to Korea. The intention of promoting local tourism is apparent from these selections. This cooperation aims to selectively increase the number of Japanese tourists to local cities of Korea, and both parties tie-up to execute promotion by uploading featured reports for introducing charms of local cities of Korea such as Chonju and Gyeonggi to the website of Rakuten Travel and jointly develop optional tours to such local cities.

The Korea Tourism Organization analyzes that regarding the Japanese market, the number of Internet reservations of individual travelers, female travelers and the FIT market will further expand in the future, and that strengthening the relationship with Rakuten Travel who exhibits strength in the above field is an important factor. It also of advantage that they can appeal products other than travel commodities to approximately 80 million Rakuten members.

On the other hand, in cooperation with Meitetsu World Travel, the Korea Tourism Organization aims to attract 60,000 tourists, which exceeds the record of the same company of 2012 by more than 10,000, to Korea and jointly develops and sells products including large-scaled events held in local cities. The Meitetsu World Travel will also give priority to creating package tours and attracting group tours in connection with MICE.

It was the first time for the Korea Tourism Organization to conclude business agreements with travel agents of the Chubu region in Japan, and this is because Korea aims to increase exposure in the Chubu region to call in tourists from the Chubu region to Korea. In this respect, both parties cooperate not only in sharing market information but also in the “Korea 100 people project” which is an OJT program for young employees of Meitetsu World Travel, and trainings are held in Seoul, Busan and Suncheon to aim for commercialization.

# **A STUDY BASED ON COMPARISONS OF INBOUND STRATEGIES OF KOREA AND JAPAN**

## **Features of Inbound Strategies of Korea**

### **(A) Strategy Utilizing Korean Culture and Networks**

The charm of the energy of “spirit, fun and passion” unique to Korea has fascinated the entire world. The Korean culture, or the Korean emotion, seems to have a hybridizing feature that goes beyond Asian countries and harmonizes European cultures, and such feature is fully used. Bae Yong-Joon, the Girls Generation, and Kim Yu-Na were employed during the Visit Korea Year. Choi Ji-Woo was employed for promoting the Korea Grand Sale in 2013, and foreign tourists were invited to concerts of Korean artists to increase opportunities of exposure to the mass media by directing splendor. Korea dominated the competition between Korea and Japan to capture shoppers so far thanks to the strong Yen and weak Won, but after the Yen became weak after 2013, the number of Japanese tourists visiting Korea for shopping purposes and the amount of consumption has reduced. The consumption trend in Korea is accordingly largely changing with shops in Myeong-dong or Insa-dong having hard times with Japanese clients while services for Chinese clients with high purchasing power are more and more developing. This is also an aspect in which essence qualities of Korea are questioned, whether Korea can set forth originalities that go beyond other Asian regions preceding as shopper’s paradises and European countries with brand power.

### **(B) Strategic Approach to the Chinese Tourist Market**

Mitigation of conditions of issuing visas is one of the reasons supporting the rapid growth of Chinese tourists to Korea. The Korean government issues multiple entry visas to employees of large enterprises, lawyers, teachers and pensioners that satisfy certain standards. The term of validity has been expanded from 1 to 3 years since August 2012, and from 3 to 5 years for people who have acquired multiple entry visas before. Documents required for applying for visas became simpler and the time required for procedures shorter. In other words, not only wealthy people but also middle-class people can repeatedly visit Korea using their multiple entry visas. The Chinese tourist market is huge and the degree of maturity of tourists varies depending on regions and amounts of incomes. Korea precisely corresponds to various targets also in case of tourist visas. Start of issuance of tourist visas to medical tourists, who comprise one of the mainstays for achieving 17 million visitors by 2017, and seasonal mitigation measures from the Chinese New Year to spring for transit passengers to Seoul are some examples. Particularly Jeju Island that aims to become an international free city has added China to the list of countries requiring no visas since 2008, causing a rapid increase in the number of tourists from China.

Jeju Special Self-Governing Province has established tourist information offices in various regions of China to promote its culture different from those of the inland areas and the rich natural environment as branding features of Jeju. It also gives priority to developing markets together with Chinese International Travel Service, the largest company in China, and to establishing sales routes via the Internet using “C-TRIP”, the largest travel site in China, in addition to media sales utilizing advertisements in Chinese newspapers.

## **Features of Inbound Strategies of Japan**

### **(A) All-Japan Promotion Strategies**

Japan counterworks with promotion on all-Japan basis to compensate networks that are inferior in number. The government cooperated with overseas government offices, the Japan External Trade Organization (JETRO) or the Japan Foundation for support in public advertisement and application of human resources at 48 exhibitions and events held in 23 markets in the fiscal year of 2012. It also reinforces cooperation not only with public but also private organizations. To name one example, travels to Japan have been advertised in overseas “Gyu-Kaku”

restaurants run by Reins International to introduce tourist information about places of production of Japanese beef and Japanese Sake offered at the restaurants.

It seems that the underlying concept is to utilize overseas networks of Japanese enterprises and Japanese food for the promotion of travels to Japan.

## **(B) Strategic Approach to the Chinese Tourist Market**

While Chinese tourists visiting Japan have become popular as moneymakers, the number thereof is fluctuating as results of political instabilities such as the Senkaku Islands dispute or anti-Japan demonstrations. In contrast thereto, Korea is steadily winning over the Chinese market. The power of Chinese visitors has opened the door to the era of 10 million visitors. Japan is gradually opening its market after lifting the ban of package tour visas to Japan in 1991, followed by the start of issuance of personal visas in 2009, easing conditions for issuance of personal visas in 2010, start of issuance of multiple entry visas for individual tourists to Okinawa in 2011, and issuance of multiple entry visas valid for three years to three prefectures in the Tohoku region, namely Iwate, Miyagi and Fukushima, similarly to Okinawa. However, companies in charge of inbound travels say that such measures are still not sufficient compared to other countries and that they are a cause of narrowing business opportunities.

The group of Chinese consumers currently gathering attention is comprised of people born in the 1980s, that is, people in their late twenties to their early thirties, referred to as the “Ba Ling Hou” generation. These people, who were born under the one-child policy and raised in a continuously growing economic environment ever since, are famous for their daring consumption behaviors and are not opposed to do online shopping. Japan has started attracting female tourists including those of this generation in earnest since the fiscal year of 2013 and particularly featuring on individual travels of women of the “Ba Ling Hou” generation for advancing city stays for purposes of fashion, beauty and relaxation.

Promotion of sales of products targeting on women in their thirties and forties who are the leading forces of group tours are also being reinforced, and approaches to local cities are being actively promoted for increasing the number of repeaters. While business targets had so far been the three cities along the coast, namely Peking, Shanghai and Guangzhou, they have been further expanded to seven cities including Nanking, Hangzhou, Shenzheng and Shenyang in the fiscal year of 2013. While the number of group tours started to reduce due to political issues in autumn 2012 which was the year of the 40th anniversary of normalization of Japan-China diplomatic relations, 40 projects have been developed including new materials ranging from Hokkaido to Okinawa using the 40th anniversary as an opportunity to be utilized in further promotions.

## **PROBLEMS IN DEVELOPING AN INTERNATIONAL TOURISM PROMOTION MODEL-IN PLACE OF A CONCLUSION**

Some warn about harmful effects of rapid quantitative growths. Degradations in qualities of services due to dominating low-priced tours and reductions in degrees of satisfaction of tourists are some examples thereof. Experts of tourism in Korea point out that improvements in excess shopping commissions, raising the level of Chinese-speaking guides, development of meals that suit Chinese's tastes and conversion to premium strategies such as medical tourism and incentive tours are the problems that need to be solved.

In case of Japan, there is another problem of discerning optimal enterprises in developing markets on mid- to long-term basis since cases of promoting products upon firmly cooperating with specific travel agents were quite rare while it was more common to exchange memorandums with travel agent groups of various countries or to designate key persons of travel agents that are familiar with the market in the invitation business.

Finally, the structural problem of demands of Asian visitors to Japan should also be pointed out. Structural problems involved in demands are related to difficulties in purchasing visits to Japan. More particularly, excess concentration to tourist seasons in spring and autumn is one factor. There exists the premise

as a common opinion that travel expenses of Asian visitors to Japan are cheap. Accordingly, hotels give priority to domestic tourists, then to tourists from European countries and finally to tourists from Asian countries. While it was possible to secure hotel rooms in the past when there were vacancies, visitors from Asian countries are deferred under the current situation of increases in demands. It might happen that arrangements of visits to Japan are hindered. It is necessary to trivialize the exemplified problems.

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# CSR IN KAZAKHSTAN

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## ABSTRACT

*Corporate Social Responsibility (CSR) is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. CSR is different on individual, company and country level, given the understanding of the concept based on moral and ethical principles. The purpose of his paper is to investigate the CSR in Kazakhstan. It is a good basis for further research, given the limited scope of literature on CSR in Kazakhstan. It can also be used as a contribution to promoting CSR concept among local businesses and the general public. CSR is considered by the researcher's as a part of her area of interest – social entrepreneurship.*

**Keywords:** CSR, Kazakhstan, culture, ethics

## INTRODUCTION

The concept of corporate social responsibility - CSR existed for many years. In the 50s-60s of last century, CSR has become firmly established in the corporate world of the U.S. and Canada (Carroll and Shabana, 2010). However, it mainly covered issues of corporate philanthropy, social security to its staff and assistance to local authorities on the professional and sponsorship basis. That work was intertwined with the corporate functions of Public Relations - PR.

In Europe, CSR formed at the Lisbon European summit in March of 2000, and also when the European Commission published a so-called “Green Paper on CSR” (July 2001) (Commission of the European Communities, 2002). Earlier, in 1995, following the example of Americans and Canadians, Europeans established the European Business Network on CSR, which was engaged in the distribution and promotion of CSR on business-to-business basis.

In Europe the term CSR is defined as the concept of integration of the social and environmental development care in the business operations of the company in conjunction with its shareholders and the environment. CSR as a policy and a concept of strategic development of companies extends to related areas: shaping and strengthening the image and reputation, corporate development – restructuring and organizational changes with representatives from the senior management of companies, their staff and public organizations, social aspects of interaction with suppliers and buyers and personnel development management.

It is also about the public relations and the interaction with local authorities, government agencies and community organizations to solve common social problems. CSR also extends to health and safety policies, respect for human rights and environmental policy and natural resources management. Corporate Social Responsibility (CSR) is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis (Green Paper CSR European Commission, 2001). CSR is different on individual, company and country level, given the understanding of the concept based on moral and ethical principles (Orazymbetova, 2012). Corporate Social Responsibility is divided into internal and external. Internal social responsibility is primarily business practice with respect to its own staff, which includes the following activities: safety (including fire, environmental and industrial safety), stable payment of wages, maintaining socially significant wage, additional medical and social insurance for employees, development of human capital workers through various training programs, training and

skills development, assistance in critical situations, External social responsibility includes: sponsorship and corporate philanthropy, participation in state, regional and municipal environmental programs, interaction with the local community, willingness to engage in crisis situations, the production of quality products.

The importance of CSR is growing with the increase of people's awareness of ethical behavior. Therefore, the growth in the number of ethical investors, employees, managers and investors further develops the concept of CSR and augments the social value the ethical practice can have.

In order to explore the topic, there is a need to understand the relationships and the environment of the CSR, which are the corporate stakeholders. These are defined as the groups without whose support the organization would cease to exist (Freeman, 2005). They include the customers, the employees, suppliers, investors, the community, the government, the society in general, the environment and the culture.

The purpose of his paper is to investigate the CSR in Kazakhstan. It is a good basis for further research, given the limited scope of literature on CSR in Kazakhstan. It can also be used as a contribution to promoting CSR concept among local businesses and the general public. CSR is considered by the researcher's as a part of her area of interest – social entrepreneurship. In this regard, few problems and issues are seen in organizations operating ethically: the lack of interest towards the issue, high costs considered within the CSR activity, the pressure of the profit-making idea, low evidence on the relationship between ethical behavior the outcomes and other.

## **COUNTRY EXAMPLE**

To provide country-specific research, there is a need to present the country profile. Kazakhstan is located in Central Asia, there are approx.17 mln. of people. The political description in short sums up to the following: independence since 1991; government type: republic; authoritarian presidential rule, with little power outside the executive branch. To shortly describe the population, the education index – 0.84; literacy – 100%. Business activity is the industries such as oil, coal, iron ore, manganese, chromite, lead, zinc, copper, titanium, bauxite, gold, silver, phosphates, sulfur, uranium, iron and steel; tractors and other agricultural machinery, electric motors, construction materials. NGO sector (ADB, 2014): non-government organizations (NGO) in Kazakhstan existed and worked already in the soviet times but they started actively develop with perestroika. Today there are recognized leaders, which names are well-known as well as small organizations established by enthusiasts or simply desperate people who decided to solve own problems through establishing an NGO.

Going back to the subject of the research, there is a need to understand why organizations should be socially responsible. Ethical business can be considered as profitable business, because of the growth of the ethical customers, investors and employees. The other reason is that the bad practice brings costs and attracts bad publicity.

Sometimes CSR is considered as a PR instrument applied locally, however in a global understanding CSR is more a strategic way of a business development. It works only when internal stakeholders (top management and employees) understand its necessity. If a company starts acting ethically, it can bring organizations problems, such as the pressure to increase profits and reduce costs from the management, lack of interest whatsoever in ethical behavior, due to the weak evidence on links between ethical practices and performances, the high costs associated with CSR, the cultural differences (usually for international companies) and other differences of stakeholders.

Thus, market gap is observed in Kazakhstan: adherence to the principles of CSR is found mostly in international companies operating in Kazakhstan, rather than local businesses. The study by A. Baisakalova (2012) show the review of the CSR reports by national and international companies working in Kazakhstan, state documents, mass media and other published literature. The outcomes show that the state is the facilitator of CSR in Kazakhstan. This is a positive trend as it may raise the society awareness of the need for CSR and the culture of creating of social value.

## **RESEARCH OUTLINE**

As a continuation of the research, the literature review of the local researchers can be provided to see the scope of their research activity in the area of CSR and their empirical results obtained. The preliminary research has showed that there was no extensive research performed locally. Theoretically, with the use of qualitative methods, the research on CSR can be further developed: in-depth questionnaires can be created and spread among companies of different type of ownership, size and from various industries, to see the relationship between the perceptions and major barriers to CSR. For now the research is only about the concept in general, generally on the approach to ethics, national cultural differences and peculiarities, the corporate culture of local and international business and other dilemmas facing managers. Ideally, an extensive research can produce the findings that would be useful for businesses, policy-makers and researchers, as the results would guide them in working on effective tools of fostering CSR as a part of strategic planning.

It is expected that such kind of research will facilitate understanding of CSR among Kazakhstan society and the business and provide with best ways of communicating the CSR to the stakeholders. Given that the main focus of the researcher is the social entrepreneurship, the CSR is considered as a part of an extensive research performed. It is considered mostly from the social point of view. The formation of CSR depends on the current societal-economic relations. The international experience of CSR show that it is necessary for a business to decide on the extent to which it will contribute to the development of the society independently and the extent to which official and unofficial bodies would coordinate societal interest and transform them into obligatory requirements for business.

## **CSR IN ACTION**

Overall, there is a low interest towards CSR in Kazakhstan. The main stakeholders are the state bodies and the business owners, but the wider society is not involved (Makhmutova, 2011). There are no mechanisms of public informing on the implementation of CSR. Sometimes charity is considered as a payment for good attitude, rather than the contribution to the development of a society. Unfortunately, it is already systemic.

Traditionally CSR is considered as charity in Kazakhstan. In the reality, this is a small part of CSR. However local businessmen do not always engage into charity, as they are afraid of further expenses and taxes. Unlike other countries, in Kazakhstan the charity is not supported by instruments such as tax exemptions. If consider the abroad practice, sponsorship, disabled staff, quality systems, educational programmes, all provide tax exemption by up to a quarter.

Indeed, in developed countries, the government encourages entrepreneurs, allowing them to spend 10-20 % of the income on charity without charging the profit tax. In the West there are special charitable organizations that receive a large amount of benefits. Tax free is also public organizations and their funders and beneficiaries. In France, for example, some funds get very broad tax relief, to the extent when they can invest in securities and not pay taxes for it. But there are only about a hundred of them. To enter this circle, you need to have an initial capital of around one million Euros. They are being looked after by the special State Council. If the fund wanted other tax preferences, the fund declares it and receives documents and tax breaks, and after that, control. If violations are detected, the fund is forced to pay taxes. It is obvious that CSR is disadvantageous to SMEs. The only thing the SMEs can count on is public image, a good perception of the main consumers and customers. However, large businesses undoubtedly benefit from CSR, as their status obliges to provide social assistance.

Some large domestic companies have already established themselves as socially responsible. At least, most of them have the CSR section on their websites – some describe the work they have done in this direction in two or three paragraphs, others have multi-page reports. But really how responsible are those domestic large businesses? It's no secret that a part of the social projects of Kazakhstan's large companies would not be sponsored without polite requests of regional authorities. In other words, this is an area of the government and business relationship, where it has certain public benefits - from infrastructure construction to the city holidays' planning. Moral aspect of such a relationship deserves a separate discussion. But it is a fact: the social costs of large and medium-sized business happen to be the result of the pressure of local officials. Sometimes it comes to the point when charity becomes the object of endless "milking" by the state agencies. It is enough to permanently

discourage entrepreneurs from engaging into the charity. Even though CSR is not yet widely promoted in Kazakhstan, this does not mean the society does not need it. It is beneficial to all stakeholders, especially the big companies in the country and the state. However nowadays businesses and the government demonstrate lack of understanding of CSR mechanisms.

There are double standards associated with CSR. This can be due to the absence of single understanding of the meaning of CSR by the wider society. The wider society skeptically assesses the ability of local companies to be socially responsible. Nevertheless many locals believe that their activity should not be limited by only profit making, creating job places and paying taxes.

In the worldwide understanding, CSR is considered in a variety of aspects: safe production, environmentally friendly activity, preservance of the environment, limiting corruption, consistent behavior towards employees and charity. According to the research made by the UNDP, only 60% of the surveyed companies know about CSR. 73% of these represent small and medium enterprises.

As for the general society, it assesses business by the quality of products and services offered and by its relationships with clients and suppliers. The input a company makes into the national economy, environmental preservance, fairness and charitable work - all are considered important, still as secondary factors.

Half of the law violations take place in oil and gas and mining industries. The example of socially irresponsible behaviour was observed in Zhanaozen, when the OzenMunaiGaz and KarazhanbasMunai companies ignored the strikes for 7 months. Similar situation has occurred in Kazakhmys Company when employees went on pay action. Failure to comply with CSR standards is well spread in Kazakhstan, whereas CSR concept is quite dated globally. Companies spend money on social projects because they find it important to maintain the reputation and corporate image. Local companies still neglect this. It is often seen though how foreign companies discriminate local employees. The example is the --Yersai Caspian contractor and Arcellor Mittal Temirtau, where employees try to get equal pay opportunities for foreign and local specialists. As a rule companies in mining and chemical industries as well as in tobacco and alcohol industries, have the lowest CSR indicator.

The example is Phillip Morris Kazakhstan that openly demonstrated its accordance with CSR principles when entered the market, by arranging cultural events for locals in the village, offering gifts to children and senior citizens, but it all disappeared with time. Now local people complain a lot on failing to comply with ecological norms, bad odours from the factory. It is understood that CSR is a voluntary thing, but it is still not clear why it works abroad, but fails in Kazakhstan. There are other cases of philanthropic actions that go prior to economic responsibility of a company. For instance, a company that managed Alliance bank has initiated golf contest during crisis times. Therefore the main source of the development of CSR is the state. There is a state standard developed on social responsibility. Its implementation brings stricter rules towards businesses in terms of labour regulations and ecology. On the other hand, a legal basis is being designed to foster the attention towards CSR. Some people argue that social activity of a business is an indirect source of resources, an element of a fiscal system. In this case the state does not take necessary measures to stimulate social activity of business. The most important principle in CSR is the methodology, given the fact that there is both individual and corporate understanding of CSR. The range of principles, rules, standards, recommendations and indices are available to assess and improve CSR activity. Among the most important and frequently used regulatory documents are the documents reflecting CSR guidelines and documents reflecting the system of reporting on CSR. Such documents usually provide recommendations, principles and standards for responsible behaviour.

In connection with the voluntary and individual character of each organization's adoption of the CSR, in international practice there are many documents regulating CSR issues. There are a number of principles, rules, standards, guidelines, and indexes for organizations to navigate, evaluate and improve their activity in the field of CSR. These documents constitute the methodological framework of CSR issues. Additionally, there are documents governing the management and certification in the field of sustainable development (ISO 9000, ISO 14063, ISO 26000, SA 8000, OHSAS 18001), as well as specialized rating indices (DJSI, FTSE4Good, KLD Domini 400 etc.)

An important step in CSR reporting and sustainable development has been the introduction of "soft" international standard of the Global Reporting Initiative (GRI) on the principle of "three baskets" or "triple bottom line": the economy of companies, ecology of production and social policy. At the beginning of 2005,

more than 600 world's major companies and corporations informed their target audience, the public and stakeholders. Their sustainability reports systematically reflected the achievements and challenges, based on the 50 main and 46 additional performance indicators developed in 2002 as part of the "Guidelines for reporting on sustainable development".

## CONCLUSIONS

At the moment the business community, government agencies and the media have two approaches to CSR. The narrow understanding of CSR is a list of social projects and programs carried out by the business to develop its own staff as well as assistance to the problematic groups on a charitable basis. In this case, CSR is reflected either in the form of traditional social sections of corporate reporting or in the form of regular social reports. Small businesses can use a narrow approach to social accountability in the form of a list of activities and projects for the development of its own staff and the support of local social development to reflect their CSR.

There is a slight trend in Kazakhstani business society, when companies start paying attention to CSR activities. In order to foster this situation, there is a need to stimulate that attention and initiatives. The state should support companies that start working or work in line with CSR concept. There are lots of companies with extensive budget that is not used on CSR, because it does not have effect on the companies, but could have effect on the development of the society. People should be more caring to understand other people in the society can suffer. If such compassion is absent, then there is no place for development.

Mostly, the companies are not motivated. Most social projects are implemented only as a PR tool, not as a help to the society. Some think that paying taxes is already enough. In case they had tax exemptions, or other benefits, they would pay more attention to CSR. It is necessary to change this way of thinking, because the companies operate in the society, they make money in the society, thus they should help the society. This kind of help should be transparent and open to the society so that everyone is engaged in the process.

The company should be interested in the development of its staff. For instance, a corporate education center has been launched in Kazakhstan, a separate building, with classrooms, special rooms on two types of energy. This center is the world biggest center of AES, it actively cooperates with highly qualified staff, arranges training seminars. The education is free for all staff, so that they would increase their motivation, effectiveness and quality. It is a good example illustrating the mission in terms of social responsibility towards the world. Investing thousands of money into CSR does not mean losing the money, but means that doing good to the society makes good to everyone. Applying CSR is a win-win, it is our concern to increase it. Some companies start working with the NGO sector. The cooperation usually touches on ecological issues, responsibilities and social projects. When it comes to big projects, companies go public. Exchange of knowledge, expertise and support is crucial. Being public adds responsibility to the words said and the plans made. Too much of PR though is not good as people tend not to believe. Recommendations address the issues of sustainable development, ethical behavior, interests of stakeholders and other issues related to companies' policies and procedures, disclosure of information, labor and industrial relations, environment, bribery, the interests of consumers, science, technology and innovation, competition and taxation.

It is important that there is a working group on developing the CSR concept in Kazakhstan. There are a number of different initiatives, on different levels. For instance, there is a website on CSR, the main objective of which is to provide an information platform for experience exchange on social projects and initiatives between businesses, government agencies, community organizations and other stakeholders. The website on CSR was created as a result of the work on CSR by the American Chamber of Commerce in Kazakhstan. The working group recognized that, despite the interest of companies, NGOs and government agencies in the development of CSR, their effective interaction is hindered by the lack of general understanding of CSR principles and by the lack of coordination of activities to promote CSR. This website will allow users to share their experiences, success stories and expertise in the field of CSR, help learn about the latest developments in this field and deepen their knowledge on the theory and practice of corporate social responsibility, as well as to keep the users informed about major CSR events and activities in the country.

Generally CSR is considered as a concept that supports sustainable development. As a rule, CSR goes out of responsibility and commitment that are set by the laws, and offers voluntary initiatives towards sustainable development. It is widely accepted that such sustainable development means harmony in development of the society – socially, ecologically and economically. The success and effectiveness of a company in these three dimensions demonstrate effective process of sustainable development, thus CSR principles applied, which can be a competitive advantage. From this idea we can conclude that CSR is the intended investment into the future. Given the growing popularity, there is a need for legal regulation, verification and measurement of CSR. The world experience can be applied in Kazakhstan.

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# THE SUCCESS FACTORS OF CRM SYSTEMS AN EXPLANATORY ANALYSIS

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## ABSTRACT

*This research aims to examine the main factors leading to a successful customer relationship management system, more often referred to as CRM. Literature review of Roh, TH, Ahn, CK and Han, I.(2005), and the DeLone and McLean (1992, 2003) researches led to the development of a conceptual model studying the determinants of successful CRM. This research integrates both human and technological factors to explain the CRM system success. The hypotheses are tested on a sample of 265 users of CRM systems in internalized contact centers belonging to Tunisian companies. The results emphasize on the importance of customer orientation dimensions in addition to technological ones as the determinants of the CRM system success. Indeed, the degree of pleasure of contact persons and the commitment of senior management influence the technological variables of the CRM system quality such as the system efficiency and the customer information quality. The total effect of “the customer orientation impact” and “the technological performances of the CRM system” enhances the quality of the company services and increases its profitability.*

**Keywords:** crm, system quality, contact centers, customer orientation, profitability.

## INTRODUCTION

Nowadays, consumers are more aware, more mobile and more demanding. Capturing their interest is becoming difficult. It is, therefore, vital for companies to refocus their priorities around customers and maintain effective durable relationships with them. Furthermore, understanding customers' needs and providing value-added services are factors that determine the success or the failure of organizations (King and Burguess, 2008). By making its customers loyal, the company has the chance to increase its profitability and its performance. It also has a better chance to survive in a market characterized by stiff competition. In this regard, improving and maintaining the relationship with the customer increases his loyalty, customer retention and profitability (Ko, Kim, Kim and Woo, 2008). This relationship is a strategic line of progress. The customers are the main source of companies' revenues. They can increase their chances of success by developing a customer-focused approach for all of their activities. Following the emergence of relationship marketing and the development of information technology, customer relationship management seems to be an ideal solution for the survival and development of the company. According to Firth and Lawrence (2006), CRM which is *an innovation in information system* has become crucial for organizations. The authors argue that more than 50% of organizations could be in the process of implementing such a system. These organizations are looking more and more to implement and ensure the CRM success. Our research attempts to examine the following question: What is the impact of human and technological factors on the success of CRM systems? This research is essentially based on the following theoretical models: System Information success model DeLone and McLean (1992, 2003) and the Roh et al. (2005) one, with the aim to provide a framework for assessing CRM's success. This research integrates both human and technological factors to explain the CRM success in the particular context of internalized call centers. This helps companies operating in these centers to raise awareness of the importance of successful CRM projects



and to improve the systems in place. This research uses a hypothetical-deductive approach. The survey is based on questionnaires to collect data.

## **CRM: DEFINITIONS, TECHNOLOGIES AND BENEFITS**

CRM allows the company to refocus on its customers. This section presents definitions and CRM technologies as well as the benefits of managing customer relationships.

### **Definitions and technologies**

Several companies and managers have a blurred vision of CRM. It is difficult to find convergent definitions of CRM in the literature. CRM can be viewed as a process, a strategy or a technology (Lefebure and Venturi, 2001 Day and Van den Bulte, 2002, Teo et al 2006.). In order to be successful, CRM projects must be considered beyond the technological aspects. CRM is a complex term that includes several organizational aspects (Mendoza et al., 2007). Chen and Popovich (2003) consider CRM as a coherent and comprehensive set of people, processes and technologies that seeks to understand the customers. This is then an integrated approach that aims to maintain and develop the relationship with the company contacts. Lefebure and Venturi (2001) apprehend CRM as follows: *"The management of customer relations, known by the acronym CRM in English, combines technologies and business strategies to provide customers with products and services that they expect. The management of customer relationships is the ability to identify, acquire and retain the best customers with the goal of increasing sales and profits."* (p. 4). Following a review of the literature on CRM, the last definition provided by Lefebure and Venturi (2001) concept is largely used. It stipulates that the customer relationship management is a combination of business strategy and technology. CRM systems are therefore implemented to support the business strategy of customer-oriented systems. CRM systems are enterprise applications that manage and control the business interactions with customers through the integration of customer-oriented business processes including marketing, sales and customer services. (Gefen and Riding, 2002; Dong and Zhu, 2006). CRM is based on a number of technologies that ensure the application of its basic principles. According to Teo et al. (2006), CRM architecture includes three segments namely: operational CRM, collaborative CRM and analytical CRM. Operational CRM deals with the daily management of a relationship with the client through the contact points (customer service, call center, sales force ...). On the other hand, collaborative CRM includes all the communication and interaction channels with customers and partners as well as work technology groups, such as workflow and e-mail. In addition, analytical CRM is the integration and processing of data, and their conversion into useful information for the analysis of customer relationships and project improvement (Chalmeta, 2006).

### **The benefits of CRM**

Richards and Jones (2008) identified the most important advantages gained by an enterprise as a result of using CRM: Identification of the most profitable customers, improvement of the efficiency and the effectiveness of the sales force, customization of products and services, improvement of the efficiency and the effectiveness of customer service, and price improvement. Krasnikov, Jayachandran and Kumar (2009) clarify the impact of CRM implementation on cost and profit efficiencies. The authors explain the CRM implementation success by the dual value creation: The firm generates profits by creating value for its customers. In addition, the centralization of information in a single database will increase the visibility and the quality of the information available to all stakeholders of the company. The expected gains are financial through value creation and the increased revenues generated by a better sales productivity. Task automation allows saving time and streamlining (Richards and Jones, 2008).

## **THEORETICAL FRAMEWORK FOR EVALUATING THE SUCCESS OF INFORMATION SYSTEMS**

One the major concerns of researchers in information systems (IS) is the evaluation of these systems and the construction of an appropriate measurement instruments to determine their success. We will present a literature review related to the model dealing with the assessment and the success of IS in general and CRM in particular.

The successful model of DeLone and McLean (1992) asserts that success is a dynamic process which is not static. It is a multidimensional construct composed of six dimensions between which there is an interdependence both temporal and causal (Seddon, 1997). Given the popularity of this model and the wide variety of attempts of revisions and adaptations, and empirical validations, both authors provide new considerations in their model, leading to the model of success DeLone and McLean (2003). The authors add to the two main features of the system, the quality of the system and the quality of information, a third dimension which is the quality of service. Furthermore, they adapt their model to the context of electronic commerce. This IS success model is widely used by researchers in information systems. It is subject to several adaptations in different contexts. Chien and Tsaur (2007), and Bernroider (2008) adapt the model to assess the success of an ERP. Lee et al. (2008) developed a model based on the DeLone and McLean (2003) one to evaluate the success of a free software model. Halawi et al. (2007) use the model to evaluate the success of a knowledge management system (KMS). All these studies confirm the popularity and the success of the model. Regarding CRM, Roh et al. (2005) propose a success model of this system where they emphasize existing relations between the prerequisites for CRM success (alignment process, the quality of customer information, system support), intrinsic success (efficiency, customer satisfaction) and extrinsic success of the system (profitability of the business). Therefore, the authors explore the factors affecting the successful implementation of CRM in the light of research in marketing as well as other ones dealing with information system.

## **CONCEPTUAL MODEL AND RESEARCH HYPOTHESES**

The proposed model seeks to identify the factors contributing to the success of systems management (CRM). The general structure of the model is largely based on the Roh et al. (2005) one. This general structure of the model allows the analysis of the first level involving the determinants of the CRM success, the second level examining intrinsic success in terms of customer satisfaction, and the last level measuring extrinsic success by the dependent variable “the business profitability”. The study of CRM stands at the intersection of two different disciplines: marketing and information systems. Therefore, the conceptual model in this paper integrates variables that are derived from both marketing and information system literature.

### **Extrinsic Success: Profitability "PROF" (Conceptual Level 3)**

The success of a CRM should normally match the net profit, which is a complete and idealized measurement of the corresponding monetary amount for past and future benefits, less future and past expenditures allocated to the use of an application of information technology. Roh et al. (2005) suggest that the success of CRM systems is based on evidence that could not be measured by net income. The authors use profitability as an alternative to net income. Profitability is defined as "the ability of a firm to secure a result expressed in monetary units" (Cibert, 1969). The profitability of a company is assessed by the ability of the company to maintain and pay the funds put at its disposal. Under the management of the customer relationship, improving satisfaction and customer loyalty becomes a powerful factor of profitability. Roh et al. (2005) measure the profitability of the business by: the increase of the number of new customers, the increase of sales and revenues, the decrease of customer loss and the increase overall profitability.

### **Intrinsic success: Customer satisfaction CS (Conceptual Level 2)**

CRM creates value for the customer (Minami and Dawson, 2008). Ryals (2005) stipulates that CRM implementation facilitates the dissemination of customer knowledge throughout the organization departments and impacts positively the quality of the decision making process (Ryal, 2005; Mithas & al 2005). It is essentially oriented towards customer satisfaction and customer retention, and these are main objectives of any CRM initiative. Some consider satisfaction as a comparison process or a part of it. Others consider it as the result of a process (consumer experience). Seen as a process, Tse and Wilton (1988) apprehend satisfaction as the consumer response to the evaluation of the perceived gap between previous expectations and the present performance of the product, as perceived after its consumption. Seen as the result of a process, customer satisfaction is the evaluation of the consumer shopping experience and an emotional response or the customer's feeling about his experience with the product or service (Oliver 1992, Lin and Wang, 2006). The most

significant definition is the one presented by Fornell (1992) which states that customer satisfaction is the collective result of customer perception, of the assessment and psychological reaction to the product or service consumption experience (Roh et al., 2005). The latter conceptualization of satisfaction was retained in our study. Several researchers assume that satisfaction has an impact on customer's loyalty, which in turn affects profitability (Sivadas and Baker-Prewitt, 2000, Rust & al., 1995 Storbacka & al., 1994, Schulze & al, 2012). Other researchers provide an empirical support for this relationship (Anderson, Fornell and Lehmann, 1994, Heskett et al., 1994 Hallowell, 1996). On the other hand, Nelson et al. (1992) found that a better customer satisfaction results in a better performance: learning, net income and return on investment. Roh et al. (2005) show that, in the context of customer relationship management, customer satisfaction has a positive impact on profitability. Hence the following hypothesis:

*HP: Customer satisfaction (CS) has a direct positive impact on profitability of the company (PROF).*

## **The Technological determinants of success: The system quality «SQ» (Conceptual Level 1T)**

The quality of the system is critical for any organization with an information system that expects to achieve a better return on investment. It must meet users' needs to better manage the technologies and the systems adopted. The assessment of the system quality by users is therefore necessary for its successful implementation. DeLone and McLean (1992) suggest that the quality of the system refers to the desired characteristics needed to produce the information. It addresses the performance characteristics of a system that include: reliability, flexibility, being user-friendly and response time. Some researchers are aware of the quality of the system as a dimension of IS success (DeLone and McLean, 1992, 2003, Seddon, 1997) and an antecedent to the effectiveness of the system (Grover et al, 1996, DeLone and McLean, 2003). It has a positive impact on user satisfaction (DeLone and McLean, 1992, 2003, Seddon, 1997 Seddon and Kiew, 1994). Roh et al.(2005) show that the support system has a positive impact on customer satisfaction with regards to the management of customer relationships. Satisfied users of the system are more comfortable and tend to show greater involvement in their work and thus perform their duties properly. This could be associated with a better customer satisfaction. A quality system improves working conditions, allows better management of activities and processes as well as an improved user satisfaction, meaning higher productivity

*HP2: The system quality (SQ) has a direct positive influence on customer satisfaction (CS)*

*HG2: The quality of the CRM system has a direct and indirect positive influence (via customer satisfaction) on profitability (PROF).*

## **The Human determinants of CRM success: The customer orientation CO (Level 1-H)**

Several studies (Kohli and Jaworski, 1990; Narver and Slater, 1990, 1994a) have investigated the effect of market orientation of the company on its performance. The association between market orientation and innovation steered the research related to the discordant results of the impact of market orientation on performance. Innovation is identified as the most important factor in creating value in the relationship between market orientation and performance. Several empirical studies have confirmed the role of marketing orientation in the success of innovations (Henard, D, H and Szymanski, D, M, 2001, Gudmundsson, A, Boer, H and Corso, M, 2004).

Van Bentum and Stone (2005) argue that customer orientation is a prerequisite for customer relationship management (CRM). For them, it means that the customer is the center of all activities undertaken to build a lasting relationship. It can then be seen as a strategic choice for the company as it allows it to listen to its customers and their needs. It then imposes a particular form of organization and a suitable management methodology. Saxe and Weitz(1982) attempt to conceptualize the customer orientation as an individual concept. The authors define vendors' customer orientation as a practical marketing concept on an individual level. The marketing concept requires that an organization determines the needs of target customers and adapts to meet them better than competitors (Saxe and Weitz,1982). Regarding the role of salespeople in the success of CRM implementation, Ahearne et al (2010) find that salespeople who have a strong "learning orientation" experience a deeper initial performance decline but a greater performance recovery over time.

Brown, Mowen and Licata (2002) apprehend the client side of the service personnel orientation and consider the client orientation of the contact person essential for the market orientation of the service organization. Brown et al. (2002) define customer orientation as the tendency or disposition of the employee to meet the customer's needs in the context of his work.

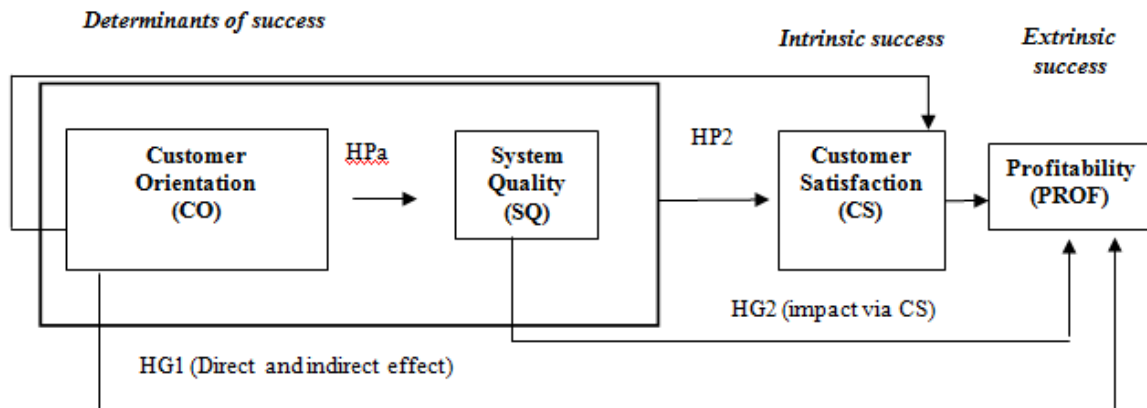
Regarding the role of salespeople in the success of CRM implementation, Ahearne et al (2010) find that salespeople who have a strong “learning orientation” experience a deeper initial performance decline but a greater performance recovery over time. The customer orientation of service staff that is in contact with the customer is a self-assessment of the tendency of employees to meet the needs of customers and the degree of pleasure they experience in meeting these needs. The degree of customer orientation of personnel in contact allows the employees to be more responsive to customers and meet their needs, which can improve their satisfaction and their loyalty. Sin, Tse and Yim (2005) assert that the orientation towards the most important customers as a key component of the CRM concept. The authors find a positive correlation between customer orientation and marketing performance as it is measured by the trust and satisfaction of customers.

*HP1- Customer orientation (CO) has a direct positive influence on customer satisfaction (CS).*

*H Pa -The customer orientation (CO) has a direct positive influence on the quality of the system (SQ).*

*HG1- customer orientation (CO) has a direct and indirect positive influence (via customer satisfaction) on profitability (PROF).*

**Figure1: Conceptual model “Success factors of CRM systems”**



## METHODOLOGY AND DATA COLLECTION

To answer the research question: What are the critical factors for the success of customer relationship management (CRM), hypothetical-deductive type process was adopted.

### Field of research

The field of investigation is the contact centers belonging to Tunisian companies. Our unit of analysis is the user of the CRM system such as: TV adviser, the telemarketer or the tele-actor or tele-operator in general (customer advisor, sales consultant, responsible for support ...). According to Lee (2006), contact centers are "strategic business units that influence customer behavior and not just a necessary cost of doing business." The choice of this field of investigation is justified by the fact that these centers are entities that use the most CRM systems on Tunisian territory. In our case, we chose internal contact centers as they are entities belonging to the enterprise. These centers can assist customers with technical support, with telesales, and with after sales service. They also help assist the staff in case of technical problems to perform their daily tasks in a suitable manner.

### Target population and sample

To determine the composition of the national population centers for internalized contacts, we contacted "Oxia", a company that specializes in consulting and CRM, and the Sfax business center that gave us two key sources of information: the 2006 and 2007 guide of "Call Center and CRM in Tunisia" published by "Tunisia IT", the newspaper of the Net Economy and Management; and " Magazine Call Center " a call center magazine. The redundant companies, which are cited in the two sources, are then eliminated. We also consider companies using only the phone and not a CRM as inappropriate for the research sample.

## Questionnaire and operationalization of variables

The explanatory nature of the research and the significant number of CRM users surveyed justify the use of a questionnaire. The construction of the questionnaire consists in developing a scale for each variable items inspired by previous work experience. Each variable is measured by a 5 point multidimensional Likert-type scale. Extreme positions respectively indicate "Strongly Agree" and "Strongly disagree". Four versions of the questionnaire were required to get the final one. The presentation of the first version to the director of research improved it. A second version was submitted to the teachers/researchers in Marketing. The third version was submitted to the developer of CRM solutions and to computing manager of the company "Systel", which is an integrator of CRM solutions. The fourth version was pre-tested with five respondents face to face in order to note their comments. This pre-test helped clarify some terminology, adapt some questions and clarify the most ambiguous concepts for respondents. These corrections have helped shape the final version of the questionnaire.

**Table1: Synthesis of the concepts and research variables**

<u>Conceptual levels</u>		<u>Concepts</u>	<u>Variables</u>	<u>References</u>
<i>Success Factors</i>	<i>Human Factors (Customer Orientation CO)</i>	<b>Customer orientation</b>	<u>CO</u>	Saxe et Weitz (1982), Brown et al. (2002) Parasuraman, Zeithmal et Berry (1988) ; Mukherjee et Malhotra (2006) Wa (2001), Rai et Bajwa, 1997 ; Croteau et Li, (2003)
	<i>Technological factors (System quality)</i>	<b>System Quality</b>	<u>SQ</u>	Guimaraes, Staples et McKeen (2007), DeLone et McLean (2003).
<i>Intrinsic success</i>		<b>Customer satisfaction</b>	<u>CS</u>	Roh et al. (2005), Fornell (1992)
<i>Extrinsic success</i>		<b>Business profitability</b>	<u>PROF</u>	Roh et al. (2005), Ngobo et Ramaroson (2005)

## Data collection

Data collection lasted 2 months and 5 days, from 7 March 2008 to 12 May 2008. The questionnaires were then distributed to 11 different companies in Tunis and Sfax. After this period 290 questionnaires were received. The rate of return equal to the ratio between the number of responses collected and the total number of questionnaires sent was then 72.5%. From the responses received, only 265 were valid, meaning they can be used to perform our analysis. The reasons for rejection of non valid questionnaires were either the status of the respondent or the lack of suitable information.

# RESULTS AND DISCUSSION

## Descriptive analysis

The analysis of 265 usable responses describes the main characteristics of the sample. The selected criteria were gender, age, education of the respondent, the nature of the operation, seniority in the company and the industry of the company. This analysis shows that the majority of respondents were women aged between 20 and 30 (65.3%). They have a significantly higher level of education (37.7% have Bachelor's degrees, 15.1% have Master's degrees, 34.3% have a dual), and have worked for 2 to 4 years in the business (38, 5%). The majority of respondents (77.7%) are in charge of receiving calls at internalized contact centers. In addition, our analysis shows that most of the respondents work in the service sector, including telecommunication (78.1%). This breakdown shows that in the Tunisian context, this sector is a pioneer in the use of CRM solutions. Companies in this sector are more oriented towards customer loyalty.

## Multivariate analysis

Descriptive analyses establish the validity and reliability of the measurement scales of the research variables. The principal component analysis (PCA) technique ensures the factorial composition and the dimensionality of the scale. The results confirm the dimensionality of SQ, CS and PROF. The results also support the multidimensional structure of CO. The values of Cronbach's alpha indicate a sufficiently high internal consistency. However, SQ2, is removed from the analysis due to the low reliability of this item. The explanatory analyses to test the hypotheses proposed in the research use, for each variable, score factors identified by the PCA.

**Table 2: Validation of scale measuring variables**

Variables		Items	Factorial contribution	Factorial contribution (Each var. separately)	Cumulated variance	$\alpha$ Crombach
<b><u>Human factors</u></b>  <b><u>Customer Orientation</u></b>	Customer orientation value	CRM system is perceived to have a great value	0,571	0,765	47,693	0,811
		It is my pleasure to respond to my clients quickly	0,716			
		I am satisfied when I satisfy my clients	0,750			
		I like to serve my clients	0,792			
		I try to help my clients achieve their objectives	0,705			
		I try to solve my clients' problems	0,685			
		I am able to respond to my clients questions	0,587			
	Relational capacity	I find it easy to smile at each client	0,745	0,726	48,160	0,731
		I like to remember my clients' names	0,745			
		It is natural to have empathy for my clients	0,582			
		I look for clients	0,696			

		to speak about their service needs				
		I remember my clients' needs	0,689			
	Customer orientation behavior	When the client has a problem, I give him a special attention	0,705	0,785	49,963	0,797
		I have the capacity to respond to my clients' questions	0,739			
		My behavior/speech inspire my client's trust -	0,656			
		I explain to each client each step taken to respond to their question-	0,719			
		When problems arise, I give them all my attention in order to solve them quickly	0,775			
		I give my clients a quick service	0,637			
	Competency (related to the contact with the client)	When I give a promise to a client to achieve task in a timely manner, I do it	0,795	0,726	61,453	0,681
		-I carry out the task appropriately since the first time	0,851			
		I understand the specific needs of my clients	0,698			
<b><u>Technological factors</u></b> <b>Quality of the system</b>	System quality	The CRM system gives instant results	0,709	0,768		
		The CRM system gives reliable results	0,752			
		The CRM system gives a quick answer	0,751			

		The system gives concise results	0,802		58,006	0,817
		The system gives complete results	0,792			
<b><u>Intrinsic success</u></b>	Customer satisfaction	- Interactions with Customer increased following the implementation a CRM system	0,728		50,868	0,668
		The implementation of the system improved the branding	0,620			
		Complaints and claims decreased following the implementation of the CRM system	0,696			
		The level of satisfaction of the client has globally increased following the implementation of the CRM system	0,796			
<b><u>Extrinsic success</u></b>	Profitability of the business	Following the CRM implementation, the number of new Customers has increased.	0,851		71,602	0,868
		Following the implementation of a CRM system, sales have increased	0,875			
		Following the implementation of CRM, the loss of Customer has decreased	0,826			
		Following the implementation of CRM, the overall profitability has increased	0,832			



The goal of the explanatory analyses is to verify the research's partial hypotheses (HP) and the general ones (HG). The methods of analysis are the linear regression and the path analysis.

### The verification of the partial hypothesis HP: (CS ----- PROF):

The profitability variable (PROF) was the subject of a simple linear regression with the explanatory variable being customer satisfaction (CS). Customer satisfaction explained 30.7% of the variation in profitability and the risk threshold  $p = 0.000$ . The HP hypothesis reflects the existence of a direct dependence between the intrinsic success (customer satisfaction) and the extrinsic one (profitability of the company)

**Table 3: Result of the simple linear regression**

Explicative variable	PROF ( <i>Profitability</i> )
CS ( <i>Customer satisfaction</i> )	0,554***
<b>Determination coefficient</b>	30,7%
<b>Fisher Coefficient</b>	116,709
<b>Signification of F :(<math>\alpha</math>)</b>	0,000

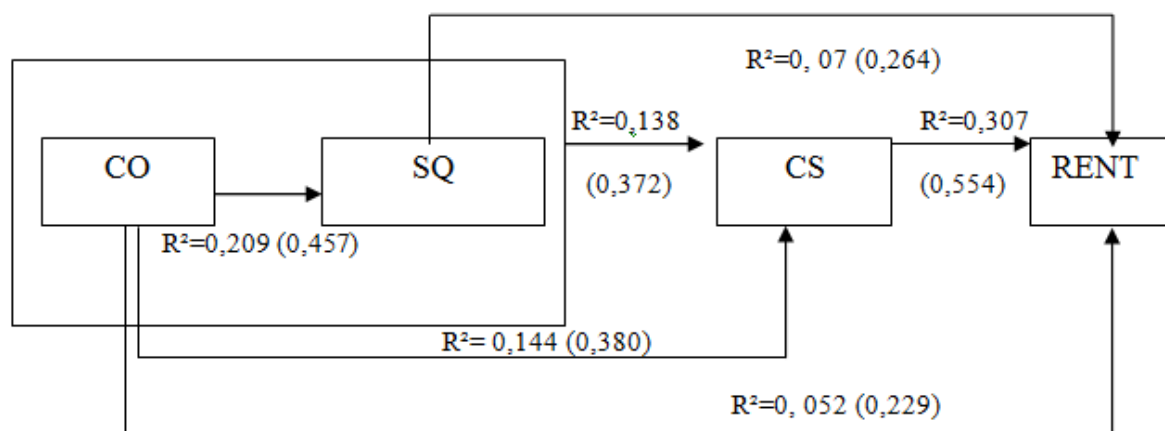
\*\*\* $p < 0,01$   
significant

\*\* $p < 0,05$  \* $p < 0,1$  ns : not

### Verification of general assumptions HG:

The general assumptions are based on an analysis of direct and indirect causality links of explanatory variables measuring the determinants of success on a variable (PROF), through an intervening variable (CS).

**Figure 2: Results of linear regression**



The analysis of pathways is performed on the variables in the model based on the results of the correlation analysis and the linear regression. The analysis only considers significant coefficients between the dependent variable and the variables of the first level. The standardized partial regression coefficients are significant at a risk level  $p = 10\%$  (Evrard et al. 2003).

**Table 4: Result of pathway analyses**

H	Pathways	Direct Effect (ED)	Indirect effect (EI)	Total effect (ET)	Correlation coefficient	Non Causality (NC)
HP	CS $\Rightarrow$ PROF	0,554		0,554	0,554	0
HPa	CO $\Rightarrow$ SQ	0,457		0,457	0,457	0
HP1	CO $\Rightarrow$ CS	0,380	0,170	0,550	0,380	-0,17

HG1	CO $\Rightarrow$ PROF	0,229	0,094	0,323	0,229	-0,094
HP2	SQ $\Rightarrow$ CS	0,372		0,372	0,372	0
HG2	SQ $\Rightarrow$ PROF	0,264	0,042	0,306	0,264	-0,042

The explanation for the profitability of the company finds its justification in the direct and indirect influence of the "customer orientation" and the "quality system."

An in-depth analysis of the results of the empirical study determines the factors influencing the success of CRM systems through the study of their influence on customer satisfaction, and their direct and indirect impact on the profitability of the company.

Customer satisfaction as a measure of intrinsic success and its influence on the profitability of the company:

Customer relationship is among the major concerns of companies with contact centers and customer service departments. The ultimate goal is customer satisfaction and needs for an improved customer loyalty and an increase in the profitability of the company compared to its competitors. To do so, these companies make every possible effort to achieve this goal. Highly qualified employees are then recruited. They are motivated; and have a relational culture, an ability to listen, and the required training. Information technologies are used to help these companies manage interactions with customers and optimize relationships by exploiting data warehouses where the history and traces of all contacts are found. These warehouses are at the heart of the CRM systems.

These customer relationship management systems optimize the decisions taken by the users, enable them to deliver a better service and also allow the customization of contact with the customer. There is then a sense of recognition that could be established between the client and the company. Satisfied customers use the services of the contact center to fulfill their needs in the best conditions. A faithful relationship is established between the company and client. A satisfied customer could advise and encourage other potential customers to use the center by telling them about the quality of its services. This will lead to an increase in the number of new customers and in overall profitability as well. This result confirms the Roh et al. (2005) one postulating the existence of a positive and significant influence of customer satisfaction on profitability.

The determinants of success and their impact on profitability: Analyzes that are performed at the first conceptual level on five variables have identified two factors: customer orientation and quality of the system. The results of the linear regression and the analysis of the pathways show that all determinant have an impact on the profitability of companies with internalized contact centers. The results show that customer orientation has a direct positive effect on the quality of the system. Employees are willing to help customers and are pleased to serve them. Support from the management and the allocation of adequate resources for the adoption of the customer relationship management system and the encouragement of employees to use the system in their daily work results in an efficient and high quality customer relationship system. This result supports the Deshpandé, Farley and Webster (1993) study that pointed the causal relationship between market orientation and innovation on the one hand; and performance on the other one.

All dimensions of customer orientation have a significant and positive effect on the profitability of the company. This variable indicates that interacting and serving the customer is inherent for the employee's pleasure. These results are coherent with previous conclusions that confirm the existence of an optimum level of salesperson customer orientation with regard sales performance (Homburg & al 2011). The employee feels comfortable and at ease when responding to customer requests. This ease will be felt by the customer, and an air of mutual understanding is established between staff and their contacts. Satisfaction indicates that employees are motivated and they are able to listen to customers and serve them better, which can improve customer satisfaction and customer loyalty. This could also improve the company's profitability. These results support those of Sin, Tsi and Yim (2005) who found a positive correlation between customer orientation, trust and customer satisfaction.

Regarding the commitment of the Top Management, which is retained as a dimension of customer orientation, the results confirm that the Top Management commitment is a critical success factor of CRM as it influences positively, directly and indirectly (via customer satisfaction) the profitability of the company. When management supports the adoption of this system and considers it as an investment and a priority, it will allocate adequate resources for better implementation and provide the necessary training to all staff to optimize the use of

CRM. This encourages managers and users to familiarize themselves with the system and to devote more effort to understand it.

All this leads to use the system in a suitable manner that improves the employees' productivity and the quality of services provided. The customers will be more satisfied and the profitability will improve. These results are compatible the Croteau and Li (2003) ones who postulate that the commitment of senior management is a critical factor for the CRM system success. "The quality of the system" construct confirms a three dimensional structure: the quality of the system, the quality of client information and the convenience of the system. The first dimension relates to the characteristics of the output of the system (quick response and immediate results, reliable and complete). The second relates to the usefulness and the integration of the client information. The system convenience relates to the ease of use. The results show that the efficiency and convenience of the system have an influence on the profitability of the company through customer satisfaction. An effective system is one that provides accurate reliable, complete and immediate results. These performances and quality characteristics encourage users to provide better services. Customers are then satisfied and profitability improves. These results are conform to the Roh et al. (2005) ones, and are close to those of DeLone and McLean (2003). They both assert that the quality of the system indirectly influences the company's net profits.

For the quality of customer information, the results show that the quality of information is a key factor for CRM systems success. It has a direct and an indirect influence, through customer satisfaction on the profitability of the company. The customer information is at the heart of any approach that aims to manage customer relationships. CRM systems with databases, data warehousing and data mining solutions used to store and operate such information optimally. Quality information provides a detailed picture of the situation of each contact, allowing the optimization of the decision in a timely manner. In addition, a personalized relationship with the client on the basis of historical data and on the exchanges made with him generates satisfaction. It inevitably affects the profitability of the company. On the other hand, these systems collect and exploit high quality, complete and useful information. This helps reduce costs and time. In addition, it allows to target the most profitable segments of the market and the production of new opportunities that may be profitable for the company.

## CONCLUSION

The originality of this research lies in the empirical validation of the conceptual model with 265 users of CRM systems in internalized contact centers belonging to Tunisian companies. The high turnout is indicative of the importance of the subject and of its relevance. It reflects the receptive nature of the users. Only four determinants have an influence on the profitability of companies with internalized contact centers. The two dimensions of service quality (reliability and insurance), the user-friendly system, the disposition of employees to satisfy customers. Interpersonal skills have not made any contributions to this study. The objective is to highlight the theoretical, methodological and practical contributions and then expose the limitations of the research in terms of scientific validity and research paths. At the end of this research we can conclude that the contributions have touched the conceptual and managerial level as methodological and practical as well.

- This research focuses on the success of CRM as an information system in the specific context of contact centers belonging to Tunisian companies' internalized system. The review of the literature dealing with the different models of IS success in general and in particular CRM system has enabled us to build a conceptual model dedicated to measuring the success of CRM solutions used in contact centers, which are generally related to the operational CRM . In terms of methodology, the hypothetical-deductive approach has helped us meet the explanatory nature of the problem and the research objectives. All these considerations lead us to adopt a quantitative method of investigation for data collection from a large sample of users. The contributions of methodological order reside mainly in the use and justification of two methods of data analysis: linear regression and pathway analysis.

Theoretical implication:

- This study is aimed at researchers in information systems, especially those working on CRM solutions and who are interested in the reasons of their success. The proposed model can provide some answers to this question in a specific context of contact centers. This model can be improved if tested in other contexts.

Managerial implication:

- This study is of importance to managers and company directors. A successful implementation and use of CRM solution enables them to gain productivity and efficiency, optimize the contact management and retain customer. In terms of managerial implications, this research attempts to highlight the role of customer orientation for contact centers to support the recommendations for these organizations to get help from marketing specialists.

- This study is of a crucial importance for contact and customer service centers. It is also important for businesses. They must take into consideration all factors of success of CRM systems identified in this study, such as the fundamental importance of the commitment of senior management for a successful implementation of the system. This results in an improvement of customer satisfaction and business profitability.

This work is also aimed at designers and developers of CRM systems that must take into account the importance of the system's characteristics in its development. An effective and good quality system with performance characteristics (response time, reliable performance, complete, accurate) is crucial for the profitability of the company. In addition, knowledge of business processes allows the programmers to design a system compatible with the activities of the company. The information used and the statistics produced are taken into consideration in the decision making process.

## **LIMITATIONS AND FUTURE GUIDELINES**

Although the research model is inclusive of technological and marketing dimensions, it has inherent limitations on the choice of variables as some showed no significant contribution to our study. Other limits inherent to the complex nature of the process of measuring the success of CRM systems are raised. The evaluation of customer satisfaction by the contact personnel may not give an accurate representation of the studied variable. In addition, self-perceived quality of service delivered by the staff could be subjective.

In addition, although the proposed model has tried to define the outline the success of CRM, it does not fully reflect the reality of the proposed relationships. Other categories of variables such as organizational and strategic ones may provide a better representation of the problem. In terms of methodology, although the sample is composed of 265 users, the scope was limited as it touched a specific channel of communication with the customer, meaning the contact center, which represents an operational level of the study. The results could then not be extrapolated to other companies adopting other types of CRM such as collaborative CRM and analytical CRM. The choice of items that measure the variables of the research may affect the interpretation of the results. It then has an influence on their generalization.

Future avenues of this research are methodological and theoretical. In terms of methodology, the research can be conducted on a sample of users in external contacts centers (outsourcing) or working for foreign companies (offshore). It could also be conducted on a number of contact centers providing the same service. It would be interesting to conduct comparative studies in these different contexts. On the theoretical level, future researches are needed to study the effect of more organizational and individual variables on success of CRM systems.

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# **MONETARY POLICY AND ECONOMIC GROWTH INTERACTION: THEORETICAL ASPECTS**

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## **ABSTRACT**

*The article deals with the selection of targets by central banks of countries in different conditions of economic development.*

*Ke words:* State monetary policy, targeting, modeling currency.

## **INTRODUCTION**

By the end of 2013, the economies of many countries were in recession. In this time, the debate about how the Central Bank can stimulate economic growth was intensified. Central Bank advocates the position that the main objective of monetary policy is to ensure price stability, ie maintaining low consumer price growth. This in turn is essential for the formation of a balanced and sustainable economic growth. Therefore, Central Bank plans to complete the transition to inflation targeting, in which the target software stability recognized as a priority objective of monetary policy.

## **LITERATURE REVIEW**

In 30th Keynes did conclude that in an economy that is in a state of underemployment, increasing the amount of money may not lead to inflation if this increase is associated with an increase in productive investment, which will in turn to employment growth in the economy. In other words, not every monetary growth, along with the softening of monetary policy is harmful to economic growth. On the other hand opponents of easing monetary policy based on the principle of neutrality money, according to which in the long term this will impact on the size of the real GDP.

This requires a more detailed consideration of this problem, which in turn suggests the central characteristic opposites quantity theory of money. Already in the XVIII century. attempts were made to specification analysis of the mechanism of interaction of money and prices, leading to the conclusion that no proportionality in their changes. Interesting ideas contained in the "Essay on the nature of trade" (1755) R. Cantillon, who showed that the impact of growth in the quantity of money exerted on prices and incomes depend on their "injected" into the economy. He believed that the increase in mass of money gradually, with a time lag raises the price level, and at the same time changes its structure depending on the differentiation of demand for goods newly arrived original recipients of money. As a result of the rise in prices depends on the method and direction of "injection" of money, but a change in the absolute level of prices is accompanied by a change in relative prices. This in turn affects the development of various industries.

Later (in the early XIX century.) G.Tornton and then David Ricardo complicated analysis of the relationship of money and prices, mediating its interest rate. It caused an increase in the quantity of money supply growth leverage and lowering of interest rates, which led to increased investment and higher prices primarily for investment goods .

From the standpoint of money involved in the neoclassical equilibrium is established, however, and there remains a classic principle of "neutrality", according to which the money "veil" real economic processes, the lubricant of the economic mechanism, which does not change the nature of his actions.

However, money neutrality will be respected only in providing a variety of conditions that make the appropriate model is very abstract and not adequately reflect the reality constructs. To study the method of comparative statistics, when a comparison of the initial equilibrium situation, disturbed by an external pulse, followed by a situation characterized by the restoration of equilibrium. As a result of analysis of the stationary economy, being in a state of full employment. Moreover, one should bear in mind the limitations of the original models based on this method, the theoretical and the more practical, as determined by quantitative values do not change, but only the direction in which they occur and the very possibility of the respective developments.

## **STATEMENT OF THE PROBLEM**

Evidence tends to show an association between the first change amount of money, the price level and dynamics. However, a statement of connection between these factors by itself says nothing about causation, and does not answer the many arising in connection with these questions: Is considered dependence is always and everywhere the same, what is the degree of independence of changes in the volume of production and the velocity of circulation money from monetary factors affect whether money only on the absolute level of prices or even on their structure, does not have any influence on the money supply dynamics and the prices themselves.

## **INTERACTION SPHERES OF PRODUCTION AND CURRENCY**

In terms of methodology, an important starting point for the study should be a provision stating that the scope of the production has a significant impact on the circulation of money. Money is an internal element of market management mechanism directly involved in "metabolism", which is in the process of reproduction. Money is integrated into this process and is dependent on him. Therefore, the formation of the money supply inevitably occurs including under the influence of factors lying on the side of production. In particular, monetary growth may be due to increased production costs and price increases that occurred in the fall of production, reducing its effectiveness and monopolistic behavior of economic agents. Modern monetary system through bank credit expansion allows within certain limits the size of the money supply to tighten up the price level grew. A similar effect can also be achieved by accelerating the circulation of money.

Thus, there is a complex system of interaction between the sphere of production and circulation of money, implying the existence of backward and forward linkages, and does not allow straight-sided evaluation, which sometimes made the supporters of the orthodox mainstream. Moreover it is advisable to go beyond those of its postulates that do not adequately reflect reality. In reality, the relationship between the mass of money, output and price level are controversial, are influenced by a variety of economic factors and is far from automatic. Therefore, to properly assess the direction of multilateral interactions, the variables under consideration, requires the use of rational elements of heterogeneous theoretical concepts. But the idea of long-run equilibrium is constantly forced them to forget about it, contrasting short-term periods of static and dynamics. As a result, there are like two parallel worlds in which different laws and trends. One world is dynamic and unstable, the other is static and balanced; one - not money - neutral in the other - neutral.

## **TARGETING PRIORITIES**

However, if we refer to the works of F. Mishkin, Dolan EJ, Campbell DK, Campbell LR, Miller RL, Van Khuzaa DD, we will see that by defining strategic purposes of monetary - credit policy, these authors puts emphasis on economic growth and high employment. But a lot of Central Banks persistently advocated the introduction of inflation targeting in spite of the fact that is not always the mode of monetary policy has demonstrated its effectiveness. Moreover, common mixed, combined variants of policy priorities or so-called hybrid, flexible regimes, and in the U.S. and all have policies hidden (implicit) nominal anchor.

Inflation targeting was highly critical of such an authoritative website as Joseph Stiglitz. He notes that "inflation targeting - the principle that whenever a valuable growth exceeds a target level, interest rates should be raised. Theoretical and empirical grounds are able to reinforce this rough recipe, it is not enough; there is no reason to expect that regardless of the source of inflation increase in interest rates would be the best answer. It is hoped that most governments are savvy enough that would abandon the idea of the introduction of inflation targeting in their countries. In particular, he attributed this advice to developing countries, where high inflation is not really associated with the quality of macroeconomic management. Under these conditions, reduction of inflation by raising interest rates would entail "significant economic downturn and high unemployment. Remedy would have been more dangerous than the disease itself".

This requires a more detailed consideration of this problem, which in turn suggests the central characteristic opposites quantity theory of money.

The central element of any monetary policy is the definition of its objectives (targets). Thus, F. Mishkin identifies six strategic objectives [Mishkin, 2006]. By his opinion, any central bank must have the following targets:

1. High level of employment,
2. Economic growth
3. Price stability;
4. Stability of interest rates;
5. Stability of financial markets;
6. Stability of the currency markets.

The price stability, full employment and growth are the main among targets in real output. It is clear that the multiplicity of targets means in practice the choice of the Central Bank of priorities in its policies. Nevertheless, it is possible to change depending on the prevailing economic situation specifically. Notably, that in the "Guidelines for the single state monetary policy" is developed annually by the Bank of Russia says the only main target now is reducing inflation and maintaining it at a low level, which corresponds formally to legislation.

However, we can't achieve the ultimate targets together; so, central banks must establish interim objectives, i.e. indicators, which are characterized by:

certainty and predictability effects on the ultimate targets,  
measurement accuracy,  
speed of obtaining relevant information,  
controllability of the central bank.

A Central Bank has such tools of monetary policy realization as:

the monetary aggregates,  
nominal interest rate,  
prices level,  
nominal GDP,  
the national currency.

But with the help of only these very tools a central banks have a lot of difficulties in direct impact on the operational targets. Therefore a central bank must allocate operational targets that are easier to manage, adjust and measure.

However, the simple definition of desirable targets currently is not restricted. Central banks are trying to establish one or another mode of targeting. The targeting policy means a public declaration of a target as a priority and its documentary fixation. So, as a result, targeting is seen as "anchors" of stabilizing prices, reducing inflationary expectations, thereby providing favorable conditions for economic growth. The nominal anchors appear in different ways:

money supply,  
exchange rates,  
inflation,

nominal GDP,  
nominal interest rate.

Moreover, common mixed, combined variants of policy priorities or so-called hybrid, flexible regimes, and in the U.S. and all have policies hidden (implicit) nominal anchor Inflation targeting was highly critical of such an authoritative website as Joseph Stiglitz. He notes that "inflation targeting - the principle that whenever a valuable growth exceeds a target level, interest rates should be raised. Theoretical and empirical grounds are able to reinforce this rough recipe, it is not enough; there is no reason to expect that regardless of the source of inflation increase in interest rates would be the best answer. It is hoped that most governments are savvy enough that would abandon the idea of the introduction of inflation targeting in their countries. In particular, he attributed this advice to developing countries, where high inflation is not really associated with the quality of macroeconomic management. Under these conditions, reduction of inflation by raising interest rates would entail "significant economic downturn and high unemployment. Remedy would have been more dangerous than the disease itself.

What should be in this case monetary - credit policy adequate to now conditions. Surely it must be pragmatic, to demonstrate flexibility and the ability to combine nature, based on the number of simultaneously ultimate goals without making the problems of economic growth something secondary and depends only on the reduction of inflation.

## CONCLUSION

What should be in this case monetary - credit policy adequate to economic conditions? Surely monetary - credit policy must be pragmatic, to demonstrate flexibility and the ability to combine nature, based on the number of simultaneously ultimate goals without making the problems of economic growth something secondary and depends only on the reduction of inflation.

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*The main directions of the single state monetary policy* (for the relevant years).

# **A DISCUSSION OF SLAVE LABOR AT MEAT PACKING INDUSTRIES**

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## **ABSTRACT**

*This article intends to introduce a category of activity – slave labor, where there is the hiring of workers without any legal ties, or honorable wages as well as labor rights and responsibilities. In this way, companies that engage in this type of activity reduce their operating costs, tax payments and increase profit margins, bringing on economic impacts, especially for the social worker as well as for society. For developing the article, qualitative research was applied to the meat packing segment, one of the sectors in the country where this harmful practice converges with society. It was concluded that the ever-growing state of development, improvement and protection of the workers is a constitutional imperative, especially because one of the foundations of the Federative Republic of Brazil is focused on the social valuation of work. Labor rights are the result of a long and arduous struggle against the dominance of archaic powers.*

**Keywords:** Slave labor – Meat packing Industries – Contemporary slavery – Labor legislation.

## **INTRODUCTION**

Society has evolved economically through business growth and job creation. Economic activities generate jobs where workers' wages and taxes are intended to be directed towards the welfare of a society. However, companies do not always legally meet this working relationship and there can be work without a direct relationship with formal employment. This article seeks to discuss a category of activity – the slave, where there is the hiring of workers without legal ties and proper wages as well as labor rights and responsibilities. In this way, companies that engage in this type of activity will reduce their operating costs, tax payments and increase profit margins, bringing social and economic impacts for the workers as well as society. Summing up, we can conclude that the ever-growing state of development, improvement and protection of the workers is a constitutional imperative, especially because one of the foundations of the Federative Republic of Brazil is focused on the social valuation of labor. Existing legislation, both in regards to the Constitution, or work safety issues present risks and existing sanctions.

## **METHODOLOGY**

For the development of this article, we applied qualitative research on the meat packing industry segment, which is one of the sectors in the country that converges part of this harmful practice with workers and society. For Lakatos, "qualitative methodology is concerned with analyzing and interpreting deeper aspects, describing the complexity of human behavior. Providing more detailed analysis about investigations, habits, attitudes, behavioral trends etc. "(2004, p. 269). In this case, we therefore, examined the working conditions of meat packing workers and how they are subjected to embarrassing situations of survival.

For the elaboration of the article as well, the study was qualified in two aspects: as to the ends and as to the means. This initiative started from taxonomy conducted by Vergara (2010). As for ends, we used exploratory and descriptive research. Exploratory because the study is innovative, not verifying the existence of any studies that address the topic in a specific way. Descriptive, because it aimed to describe the situation and the conditions of meat packing employees. As to the means, the bibliographical research was conducted in books, on *sites* and in articles. Also, with regard to the documentary analysis of the existing legislation on the subject.

## SLAVE LABOR IN THE WORLD

Humankind has gone through several periods where slavery was an economically accepted practice. In the United States and Brazil, for example, it was a way of getting cheap labor that economically sustained the capitalist system. People were sold and purchased as mere merchandise. Today, this practice is no longer socially accepted however, certain economic sectors still practice a form that is characterized as slave labor. Skinner (2013) states those countries like China and India, for example, which have more slaves than the rest of the world. Part of this statement is supported by emerging countries which are in the process of economic growth; in this way, the size of the population, the need for large-scale production and an international consumer market motivating them that there is the possibility of having company groups that may adopt such illegal practices.

In Latin America, according to the same author, there are thousands of people, including children, who work in slave-like activities, either in manufacturing or in prostitution. Countries such as Haiti, Mexico, Russia and Brazil have people framed within the so-called contemporary slavery, according to the International Labor Organization – ILO (2012): forced labour and debt bondage, denial of freedom and prostitution, whether children as well as the traffic of women. However, this article focuses on the corporate aspect of the situation.

In Brazil, illegality is tied to generally degrading work, liberty deprivation, low wages and formal registration on the working papers according to labor laws. This largely occurs in a rural environment, but also in urban area, where part of the known examples are related to Latin Americans, particularly Bolivians in the manufacturing industry. Slavery was legally banned as of May 13, 1888 through the *Golden Law* (Lei Áurea). However, the lack of manpower to meet the demands mainly related to agricultural and livestock sectors, has led the Brazilian Government to seek on the international market another kind of slave labor, as the Japanese, portrayed by one of the authors of this book, did (KUAZAQUI; 2007).

In this country, there are laws that aim to eliminate this social scourge, but they stumble on implementation issues, where farmers and cattle raisers pay fines and lose some rights such as the rural credit, but there are various subterfuges that promote their recurrence. In other words, the punishment is lenient compared with the benefits to be gained from the illegality. In order to eradicate slave labor in the country, the National Commission for the Eradication of Slave Labor (CONATRAE) was established in August 2003, with a set of actions, where responsibility is shared by three Government bodies - Executive, Legislature and Judiciary, in addition to Federal prosecutors. Even so, the problem in Brazil persists.

## MEAT PACKING INDUSTRY

To be able to understand the risks that meat packing workers are exposed to and what slave labor in this area can cause, it is important to know the law governing the safety of the same. Non-compliance with the legislation, intensive workdays, precarious cafeteria and dining areas and lack of individual and collective safety equipment. On April 19, 2013 the Ordinance of the Ministry of Labor that created Regulatory Standard-NR-36, which establishes the minimum requirements for evaluation, control and risks monitoring in activities developed in the

slaughter and meat processing and dairy products industries intended for human consumption, was published. In this way, the worker has a permanent guarantee of safety, health and life quality at work. This legislation is based on Ordinance 3214/1978 of June 8, 1978 of the Labor Ministry and approved the regulatory standards relating to safety and occupational medicine.

A "slaughterhouse/meat packing industry is a complete establishment of plants and suitable equipment for the slaughter, elaboration, preparation and conservation of the species of animals in various forms, with complete, rational and correct use of non-edible by-products and must have industrial refrigerating facilities" (NR-36, annex I). Currently the state of São Paulo takes first place in Brazil with a significant number of workers in meat packing industries, reaching more than 63 thousand. Following this come the states of Paraná, with 57 thousand and Rio Grande do Sul, with 52 thousand workers. According to data from the Ministry of Social Welfare (MPAS), between the years 2010 and 2012, 61,966 accidents in industry were recorded, with 111 deaths in the same period. The number of health-accident benefits granted between 2010 and 2012 was 8138. According to the data of 2012, the state with the highest number of meat packing workers is **Sao Paulo**. There are 63,796 workers in the state (16.5% of the total meat packing workers in Brazil), with an average wage of R\$ 1,543.05. The second state with the largest number of workers in the sector is Paraná, with 57,413 workers (14.7% of the total) and average wage of R\$ 1,155.92. Then we found Rio Grande do Sul, with 52,531 workers and average wage of R\$ 1,285.82 ([www.cntafins.org.br](http://www.cntafins.org.br)).

Despite the wages described above, informality and slave labor have shown that prolonged working hours and submission of workers to unhealthy activities have kept many individuals away from their jobs. Therefore, the Regulatory Standard is a tool that protects those people who work in meat packing industries.

The NR-36 determines that:

...for the workers who develop activities directly in the production process, in other words, from the receiving point up to the expedition, where repetition is required and/or excessive static muscle loads or dynamics of the neck, shoulders, back and upper and lower limbs, must be ensured Psycho-physiological breaks distributed...

The distribution of breaks for working loads of up to six hours, can have a tolerance time for implementing the pause in as much as 6hrs. 20mins, being that the pause time is 20 minutes. For a workload of up to 7hrs.20mins, the tolerance time for applying the pause will be up to 7hrs.40mins and the set pause time is 45 minutes. In addition, finally, for a workload of up to 8hrs.48mins, with a tolerance of up to 9hrs.10mins, the pause time will be 60 minutes.

Therefore, one verifies that the employer needs an administrative control that requires organizing tasks in a systematic way, where performance requirements must be compatible with the capacity of the worker, aiming to minimize static and dynamic physical efforts that could compromise their health and safety.

Violation of these principles implies in an illicit act that incurs in "submission of the workers to conditions similar to those of a slave", according to what Neves has said (2012, p. 11).

In the case of meatpackers: exhaustive working hours, degrading conditions, non-compliance with preventive standards of risks of accidents.

According to Palo Neto, "slave labour is not limited to the violation of labor issues, but is a serious violation of human rights and, frequently, the finding of the existence of slaves or similar jobs that are accompanied by other crimes" (2008, p. 96). These crimes and misdemeanors are denounced as environmental, land grabbing, document forgeries, in addition to physical injuries.

**TABLE 1**

Wages for Slaughter House and Meat Packing Workers per State: Brazil 2012

State	Number	%	Average Wage
São Paulo	63,796	16.4%	R\$ 1,543.05
Paraná	57,413	14.8%	R\$ 1,155.92
Rio Grande do Sul	52,531	13.5%	R\$ 1,285.82
Santa Catarina	44,047	11.3%	R\$ 1,441.36
Minas Gerais	32,770	8.4%	R\$ 1,072.11
Goiás	29,151	7.5%	R\$ 1,283.23
Mato Grosso	26,580	6.8%	R\$ 1,377.53
Mato Grosso do Sul	24,620	6.3%	R\$ 1,247.16
Rondônia	10,064	2.6%	R\$ 1,148.35
Rio de Janeiro	9,421	2.4%	R\$ 1,080.17
Pará	7,628	2.0%	R\$ 1,169.86
Bahia	6,508	1.7%	R\$ 1,036.05
Espírito Santo	5,179	1.3%	R\$ 1,181.21
Tocantins	4,212	1.1%	R\$ 1,172.56
Distrito Federal	3,927	1.0%	R\$ 1,159.23
Pernambuco	2,469	0.6%	R\$ 1,052.22
Maranhão	1,463	0.4%	R\$ 1,052.32
Ceará	1,291	0.3%	R\$ 880.70
Paraíba	1,212	0.3%	R\$ 917.04
Acre	1,211	0.3%	R\$ 1,080.54
Rio Grande do Norte	844	0.2%	R\$ 969.08
Piauí	547	0.1%	R\$ 1,021.35
Roraima	424	0.1%	R\$ 1,530.82
Amazonas	393	0.1%	R\$ 1,468.14
Sergipe	356	0.1%	R\$ 815.45
Alagoas	276	0.1%	R\$ 860.77
Amapá	53	0.0%	R\$ 852.09
<b>Total</b>	<b>388,386</b>	<b>100%</b>	<b>R\$ 1,286.29</b>

Source: RAIS,2012 - Elaboration DIESE

## The Problems at Brazilian Meat Packing Industries

The departmental structure, processes and organizational chart of a company are developed from different factors such as initial investment, a need for financial return and mainly the analysis of the market demand. From this perspective, we see the need for a systemic view on the dynamics of the internal and external environment in which the company is inserted. According to Porter (1985, p. 31): "the value chain of a company fits into a larger chain of activities called a Values System".

From the analysis of the value chain, it is possible to respond to and understand the internal and competitive environment in which the company is inserted:

□ Which and how many resources – financial, human, material, for example, are needed so that the company can maintain its operations within the perspective of demand for products and services;

□ How will such features be processed, how will internal relationships be developed, adding value and transforming to meet market expectations. A map of relationships is important in order to establish a guideline on how the processes and relationships will be made; and



- What and how will it be offered to the market in order to meet the needs of the market and consequently bring a financial return that generates the sustainability of the whole process.

The productive chain that includes meat packing industries, involves agricultural input producers who supply the farms, veterinary services, funding, the farm itself as a unit of production, raising and possible slaughter, meatpackers, distributors and even exports. Each component of the chain adds value to the services provided, which are duly incorporated into the final product – in this case, meat.

In order to ensure that the population consumes quality products from the point of view of health, the Federal Prosecutor and the Ministry of Labor, in conjunction with the Brazilian Environmental and Natural Renewable Resources Institute (*Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis*) (IBAMA), they maintained intense surveillance. In this way, they were able to identify meat packing industries that would be selling beef from farms that were practicing a series of irregularities such as damage to the environment, indigenous rights and slave labor, this being a constant irregularity in the sector.

## **Contextualization with Emerging Economies.**

According to the United Nations Organization (UNO) [www.un.org](http://www.un.org) (accessed on 12/12/2013), countries can be classified as emerging economies according to several factors. According to the Alexandre de Gusmão Foundation (2012), the prediction is that, countries classified as emerging have a growth that is greater than the world average in the coming years. The group formed by Brazil, Russia, India and China (BRIC), Indonesia, Mexico and Turkey will overcome the growth of developed countries, as for example the United States of America, Japan, Germany, United Kingdom, France, Italy and Canada (G-7). According to Dicken (2010, p. 375):

... food production remains an intensely local process, linked to climatic conditions, soil and often specifically sociocultural. At the same time, certain types of local production, mainly high-value foods, have become increasingly global in terms of their distribution and consumption. For wealthy consumers with access to abundant overflowing supermarket shelves, the 'permanent global summers' have taken the place of the seasons. However, these seemingly idyllic circumstances for rich consumers have a dark and unpleasant side.

Analyzing in parts, livestock activities involve essentially local activities, these inserted within a legal-socio-economic context. Although this economic activity is not only the merit of developing economies, which are the ones that sometimes have the productive resources and economic orientation to better develop these activities. These countries usually feature a precariousness of resources and infrastructure, favoring production that is more informal. However, the major consumer markets are the more economically favored countries, who import food and derivatives and focus essentially on their economic skills related to industry and technology.

## **Employment Relationships, Labor Relations and Contemporary Slavery.**

The work has always been part of human activity. Ever since most remote time, humankind has labored, beginning with the search for foods to ensure their own survival. Subsequently, in clashes and battle with their fellow creatures, they realized that it was more useful to enslave them than to make them prisoners (VIANNA, 1999: 44), thus giving birth to the phenomenon of slavery, which was considered at that time to be just and necessary.

According to Russomano (1984, p. 105), labor relations, in the course of history, took place in five phases, namely: "the slavery regime, the serfdom regime, the corporate scheme, the manufactures scheme, and finally the wage-earner regime" The long journey through which slave labor passed up to its transformation into wage labor reveals the intensity of human struggles for labor rights, highlighting the contribution of the ideals of the French Revolution and the intervention of the state to this construction. The need for creating an instrument that would guarantee the implementation of such rights and provide security in legal relations between employee and employer brings about an employment contract, disciplining contractually working relationships. Nowadays, it can be said that the employment relationship is the genus from which the employment relationship is a species. Within this, there are still embedded in the employment relationship other forms of employment

provision, such as autonomous, freelance and temporary work. For Amauri Mascaro Nascimento (2003, p. 454), the employment relationship is "the legal relationship of a contractual nature having as subject the employee and the employer and as an object a subordinate, continued and wage earned employment ". Slave labor, however, has not yet been effectively abolished, clothing itself in one of the most dismal realities of the human species present in all parts of the world, especially in Asia and South America. In Brazil, at the same time, ever since the 60's, there have been denunciations of enslaving practices, not only in the countryside, but also in urban area, persisting to the present day.

Brazil prohibits slave labor and the first foundation lies in the Federal Constitution of 1988, either by express provision or by the set of principles that it harbors. Already in its scope, the Higher Law offers as one of the foundations of the Federative Republic of Brazil the principle of human dignity (item III), contained in the protection of the worker; then, article 5. , item III, deals with the prohibition of forced labor to ensure that, "no one shall be subjected to torture or to inhuman or degrading treatment". Item (XIII) deals with the freedom of professional practice, with "free exercise of any work, trade or profession, meeting the professional qualifications which the law establishes". Item XLVII, item "c" forbids the adoption of a penalty of forced labor, revealing that not even the State can force someone to work. Next, article 7 of The Magna Carta, ensures minimum social conditions for labor workers, bringing dignity to the condition of social and fundamental rights of the human person. In addition, throughout the body of the constitutional text references to labor protection, as for example in article 170 that rules on the valuing of human work with the support of the economic ordinance. In the infra-constitutional plan, the consolidation of labor laws – CLT has a wide range of general and special standards for work supervision, and in the same proportion punishment for employers who contravene such rules, which state that labor legislation also serves as the foundation for the prohibition of forced labor. It is important to consider however, that both Labor Legislation as well as Brazilian Civil Legislation do not have a definition that expresses what slave labor is. In view of this legislative gap, the doctrine and the conventions of the International Labor Organization have been compelled to construct a complementary concept of slave labor.

Under the doctrinal optical, slave labor is characterized by the presence of coercion and the denial of freedom, being the fruit of the perverse combination of degrading work and deprivation of freedom. These are however open concepts, take as an example the demeaning work, which is possible to fit into a wide range of situations. Slave labor *can* still be classified as rural; an environment in which workers meet serious obstacles when severing ties with their employers. This can consubstantiate in document retention, debts that they are forced to acquire, generally resulting from the acquisition of food for their livelihood, or other nefarious practices, such as the hiring of workers by labor contractors, known as "cats". As an urban nature, where there can even be a payment of wages, but it would be in very small amounts, as well as introducing other standards of work supervision, like the exaggeration of workday hours beyond the legal limit, the denial of a vacation, not meeting the minimum safety and occupational medicine standards etc.

The International Labor Organization, in turn, treats slave labor in conventions 29 and 105, in agreement with the following: Convention 29: forced labor (1930): provides for the elimination of forced or compulsory labor in all its forms. There are some permitted exceptions, such as military service, properly supervised penitentiary work and obligatory work in emergencies, such as wars, fires, earthquakes, etc. In Convention 105: abolition of forced labor (1957): prohibits the use of all forms of forced or compulsory labor as a means of coercion or political education; as punishment for political or ideological expression of opinions; the mobilization of work forces; as a disciplinary measure at work, punishment for participation in strikes, or as a measure of discrimination. (Combat, 2014)

As previously stated, there is no legal definition of slave labor under labor or civil law. However, criminal legislation, in order to contribute in the confrontation of such a delicate issue, treats slave labor as being defined as the crime of slavery in article 149 of the Penal Code, aiming at conceptualizing the conducts that configure the "condition similar to that of a slave", according to the following:

Art. 149. Reduce someone to a condition similar to that of a slave, submitting to forced labor or the exhaustive work hours, whether by subjecting them to degrading work conditions, restricting, by any means, their locomotion because of debts contracted with the employer or manager:

Penalty: imprisonment from two to eight years, and a fine, in addition to the penalty corresponding to the violence.

§ 1º Under the same penalties incur those who:

I - curtails the use of any means of transport by the worker, with the purpose of detaining him/her at the workplace.

II - keeps overt surveillance in the workplace or seizes documents or personal belongings of the worker, with the purpose of detaining him in the workplace.

§ 2º The penalty is increased by half if the crime is committed:

I - against a child or adolescent;

II- by reason of prejudice of race, color, ethnicity, religion or origin.

Noting that the article mentioned above is the result of law n. 10,803, of December 11, 2003, which sought to clarify, as much as possible, the concept of 'conditions similar to that of slavery'. It features that when the victim is subjected to forced labor or exhaustive working hours, both in the event of degrading work conditions, as in the case of restriction of locomotion due to debts contracted with the employer or manager. As one can see, the current text of article 149 of the Penal Code meets entirely with the international conventions against forced labor of which Brazil is a signatory.

On the other hand, it is processed in the National Congress proposal for the amendment to the Constitution known as SGP on slave labor, number 438/2001, which gives new wording to article 243 of the Federal Constitution of 1988, allowing the expropriation of lands where workers are found in slavery conditions. For final approval in the Senate, where it is processed under the identification of PEC 57A/1999, a vast network of conspiracy between parliamentarians has been woven, stating that in exchange for the "PEC of confiscation of property by the practice of slave labor", the conceptualization given by article 149 of the Penal Code would be revised. The negotiation of a new legal definition has been seen by most sectors of society as an expedient, as well as a procrastination, able to render the PEC of slave labor harmless. So far, the latest progress in the processing of the PEC in comment occurred on December 9, 2013, being in the CCJ, with the Senator Aloysio Nunes Ferreira.

## CONCLUSIONS

With the publication of new regulatory standards presented in detail, one can perceive the risks to which workers are exposed. Slave labor, both in slavery at the time of the Empire as it is nowadays, maintains the same characteristics: physical, psychological and moral.

Summing up, we can conclude that the ever-growing state of development, improvement and protection of the workers is a constitutional imperative, especially because one of the foundations of the Federative Republic of Brazil is focused on the social valuation of labor. Labor rights are the result of a long and arduous struggle against the dominance of archaic powers. A logical conclusion being that, slave labor stains a working relationship, disqualifying it, denaturing it, wounding with death the simplest principles and individual guarantees laid down in the Federal Constitution, as well as in the Universal Declaration of Human Rights, in addition to addressing all protective networks contained in the national industrialized legislation.

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# **A DISCUSSION ON ENTREPRENEURSHIP, CREATIVITY AND INNOVATION APPLIED TO INTERNATIONAL MARKETING**

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## **ABSTRACT**

*This article seeks to discuss the importance of the need to undertake, create and innovate in Administration, especially considering the international market. For development, it is presented in a contextualized manner, the evolution of Organizations throughout the ages and its importance in an economic and social point of view. Within this vision, the entrepreneur is differentiated from the businessperson, evidencing the individual entrepreneur and the creative economy as fomenters of new business opportunities. In a society in which there are no more borders, only the political and cultural ones, enterprise, creativity and innovation become necessary as a means for differentiated and sustained growth, especially considering domestic and international competition. As human skills applied to the professional field, people can use them in a handcrafted and differentiated manner, to render the strategies of the actions into ways of modeling businesses and solutions, thus reaching a state of the art.*

*Keywords:* Entrepreneurship, Creativity, Innovation, International Marketing, Administration.

## **INTRODUCTION**

In Brazil, among one of the applied social sciences, Administration stands out for having a direct corporate application. This is because it is through management indicators that related fields such as Finance, Personnel Management, Production and Marketing intercommunicate with internal and external environments, enabling, in a rational and systemic thinking, a full use of resources to obtain the best results. However, Administration cannot be treated as an exact science, which deals with the relations between the trinomial: markets-company-resources, seeing that it deals with the relationships between people and their respective potentials, with differentiated levels of knowledge, vision and interconnectivity.

The understanding of this reality causes the company to adopt ways of acting with strategies focused on individuals, differentiating it from direct and indirect competitors. They should, within their bounds, reflect and rethink their concepts and paradigms, to practice the science of Administration in a creative, innovative and entrepreneurial, sometimes rationally and other times emotional form, in the sense of breaking paradigms and overcoming challenges or even creating them. This direction may have its risks, but it is only with this daring that tomorrow may also be the time to harvest many successes.

Thus, this study discusses how entrepreneurship, creativity and innovation can be used in professional practices in companies.

## Methodological Aspects Used in the Article

Spencer and Spencer claim that competence can be defined as a set of knowledge, skills and attitudes that justify individual performance and are contextualized with the intelligence and personality of people. Entrepreneurship, creativity and innovation are treated here as human skills and thus used to the present qualitative research, since the proposed article is to discuss, in a contextualized manner, the incorporation of such practices in professional life and not indicate statistically those practices that have already been carried out.

As Denzin and Lincoln (2003), this aspect involves a variety of empirical materials such as case study, personal experience, life history, direct and indirect observation, among others, that can describe moments and meanings of the individual, enabling a wide variety interpretive practices, ensuring a different profile on the subject. On the other hand, the interpretation and analysis of practices in this category are too complex, because undertaking is not only repeating already consecrated actions, but also having the ability to create other different ones.

According to Gergen, Gergen (2006), "the field of qualitative research is full of enthusiasm, creativity, intellectual effervescence and action", (Denzin & Lincoln, 2006, p. 267), therefore the goal is to present *insights* on the proposed topics.

As for methods, initially an inductive one was used, because according to Lakatos and Marconi (2003) "Inductive arguments allow for varying degrees of force, depending on the capacity of the premises to support the conclusions. In short, inductive arguments increase the contents of the premises, while deductive arguments are sacrificing the content expansion to achieve 'certainty'." (p. 267)

The premises are based on the assumption that, usually the use of such human skills brings significant and positive contributions to any type of business. These practices are a consequence of human skills practiced in a corporate environment that vary in accordance with the endogenous and exogenous motivations of each person, depending on their training and personal, as well as, professional life cycle. Another method used, to confirm certain premises, were case studies, which ensured a certain tangibility in the light of the theory presented.

The case studies are presented in a simplified form in the final topic of this article. They allow for knowing the capacity of entrepreneurship, creativity and innovation from a sample composed by students of the penultimate semester of the Administration course who have chosen to include three additional disciplines (termed as *minors*, a sort of specialization in International Business Management) to their normal curriculum. The average age is 21 years of age and almost all are in professional activity, usually in a required supervised internship.

The first case study, after developing and discussing the concepts, is read and discussed. This practice serves as a warm up for the students. Subsequently, the following questions were brought forth: What lessons can be drawn from this case study. How does one evaluate the posture of the new manager? How do you evaluate the change in the employee's behavior? Do you consent to the release of resources by the Finance area and not the Personnel Management area? What recommendations would you give to the company in relation to the assessment of performance and motivational aspects of their internal collaborators?

This small real case explores the influences of endogenous and exogenous variables on the individual and how the environment, generating motivation to do it differently, can stimulate them.

In the second case, the following questions were asked: What lessons can one learn from this case study? What impressions did you get of the company's posture? What impressions did you get of the employee's posture? What is, in reality, the problem of the company? What recommendations can be made to the company to promote commitment on the part of the new trainees, thus lowering a high turnover?

The objectives of this second real case study were the contextualized discussion of the importance for strategic planning and resource management to ensure the effectiveness, efficiency and efficacy of the company in order to ensure stronger – more solid evaluation and control.

The third case study, in turn, had the following issues: Contextualize the need to undertake, innovate and create with this case study. Review the points in common and the differences between them. What is the relationship with the proposed themes? What influence does culture have on this case? What would happen if this same fact were to occur in a European country? How can cultural variables have influence on the business development of a company? How to analyze the example of the mobile hot tub? Make a deeper study into the case itself. What business lessons can they obtain from it?

This case study aimed to discuss the importance of understanding cultural diversity, respect for different cultures that influence the decisions of international marketing.

The fourth and final case study brought the following questions: What benefits can be evidenced from the decision of internationalization at the time in which the process began. Do you consider the internationalization of the enterprise to be entrepreneurial, creative or innovative? Which scenario could be described today, had the company decided to become internationalized? What is the relationship of the case study with the contents of international marketing? What benefits does the company have, at present, stemming from the reality of working in about 50 countries?

As a conclusive example, this case study aims to present and discuss a well-known corporate case, with greater magnitude that significantly influenced the development and sustained growth of a company at a time when, neither discussing internationalization nor human competences were discussed as they are nowadays.

The script of questions was adequate to the content of the discussions and served as parameter for understanding the application of the case studies.

For techniques, aside from bibliographical, field research was used along with classroom practice. It should be noted, once again, that the focus here is on human skills and not on international marketing or the didactics of higher education, so as not to blur the objectives of this article.

## **ADMINISTRATION AND THE NEED TO UNDERTAKE, CREATE AND INNOVATE**

In Imperial Japan, the main source of carbohydrates came from rice, an ancient and cultural food. For cultivating paddy fields, it is necessary, in addition to land-flooded plains, several inputs such as, grain selection for planting, human labor for planting and harvesting and storage maintenance, etc. In addition to these, other factors, such as climate, pests and even disasters can influence the outcome of the process.

Thus, Japanese folk wisdom seemed to have already detected, since ancient times, that, with the exception of the external factors, over which one had no control, others could be optimized by the planned use of resources and improving the results. With this in view, it became normal to breed fish in the wetlands, which contributed to the paddy fields being free of some pests, seeing that the fish fed on insects that roamed there. These in turn, were fertilized naturally and at the end of the period, productivity had grown considerably, with a lower use of resources and less human handling.

From this example, one might note that Administration may be seen both within the individual as well as within the company, and both of them have the market as a connection. The need for survival causes individuals and companies to seek solutions for their problems. Nowadays, winners must create their challenges to maintain growth and development constancy. They should seek answers for questions that have been very well prepared.

## **The Corporate Point of View: The Evolution and Life Cycles of the Organizations**



Companies have changed in recent decades. In the past, they had a larger group of employees and little productivity in comparison to the current reality. Today, they have had to mold themselves to the changes and transformations of the environment.

Adizes (1999) comments that, "It may be new to you if I say that we all experience changes and that the changes are a phenomenon that will exist as long as we can perceive anything. Changes give rise to events that can be opportunities or problems." (p. 3)

The changes in the environment, in which enterprises are inserted, can be derived from structural and/or cyclical factors of the society. Structural factors are related to the percentage of participation of the basic sectors in the economy, such as agriculture and livestock as well as at the industrialization level of a country. Therefore, the higher the industrialization percentage in the economy, the better structure companies that serve the market will have. Sometimes, some behaviors are predictable, from their historical recurrence. However, cyclical factors are those framed as situational, that eventually occur and do not repeat themselves. In agriculture, it can be a drought, for example. These are facts that represent short-term temporary situations, and do not occur frequently. According to Kotler and Armstrong (1999), industrial structures can be classified as:

- **Subsistence Economies** – directed at agriculture and livestock. People consume a good part of the production, trading the surplus for other products and services. The economies of this category offer few opportunities for development and business, except if there were the possibility of increased production and gain scale through the injection of foreign capital.
- **Exporting Economies of raw material** - this kind of economy may present itself as a natural consequence of a subsistence economy. It can also be guided through the wealth of natural resources. Opportunities may exist for equipment and supplies, for example, and the economic development of the country can be influenced by planned investment, because there may be a concentration of income and increased poverty.
- **Semi-industrialized economies** - developing or emerging, are characterized by increasing industrial participation and a growing middle class. They present specific needs. If there are sustainable government policies, this type of economy may influence the development of other sectors, as well as influencing, particularly, the volume of exports and imports.
- **Industrialized economies** - targeted at industrial goods, capital and technology. They offer numerous market opportunities for export of goods of aggregated values, as well as, for imports of for more primary goods, which constitutes as an ideal situation. They may also be aimed at providing intellectual capital and services, involving other areas of previous economies, such as agribusiness, for example, refers to a contemporized re-reading of agriculture and livestock. (p. 51)

In this way, one can associate the structure of companies with the country's industrial and economic moment. The smaller the challenges, the better the organizational structures are. Another way to assess the life cycle of organizations can be associated with its size and organizational history. According to Geus (1999), companies can go through the following life cycle phases:

- **Birth:** when they are most likely smaller, commitment and entrepreneurial spirit are key commitments of the individual to the business. It is a phase of greater enthusiasm for developmental possibilities and prospects.
- **Adolescence:** when there still is the power and commercial centralization of activities, on the part of the founder. It still is a period of greater individual commitment, realizing the need for expanding the number of employees.
- **Adulthood:** when it reaches mid-size and the owner already feels the need to have indicators and management tools, mainly due to multiplied situations.
- **Maturity:** when it is larger, there is a need to control assets, and there are more complex operations and processes.

Such a life cycle is influenced by the environment in which the company is inserted, as well as by the company's ability to meet market needs and generate assertive strategies.

Thus, companies must carry out the management of their scarce resources, from rational forecasts prompted by strategic systems thinking. However, those predictions are only effective when the company is inserted in an environment without major changes and transformations, in which it can grow from its own management. In other words, growth would come from the evolution of the industrial structure or size and outside the prospect of short-term factors.

However, with the large variations that the international economy has passed through in recent years, companies must adopt, in their daily lives, behaviors and actions. The big challenge is when the changes and transformations occur very quickly and unstably.

Rifkin (1995) assesses that society is moving towards a model of structural unemployment, in which there will be activities related to work, but not necessarily the creation of formal posts of employment. He believes that society should return to the intangible, for example, such as the actions directed to the third sector. This statement leads us to believe that companies should mold themselves to the macroeconomic moment, according to their structure, while continuing to take into account that there is another variable referring to human organizational talents; they need to have personal and professional growth.

The way one reacts to changes and transformations is what can make the difference between what is considered normal and what can be termed as creative, innovative and enterprising, as highlighted by Adizes. When a group of companies can standardize forms of reaction to changes, it is possible to categorize them as generic strategies, starting from structural changes of a given economic sector. On the other hand, the reactions may originate from a differentiated perception of the company, from other variables and within the global vision of their managers. In this sense, it can be affirmed that there was a rift between simple systemic thinking and the possibility of actions that enable scale, productivity and quality gain. The great challenge is to perceive this new vision and know when to start the changes.

Drucker (1986) notes that, "the entrepreneur transfers economic resources from a lower productivity sector to a higher sector and one having a higher income." (p. 22). In fact, one of the initial propelling forces of entrepreneurship was the attempt of the companies to free those rational aspects of resource management from the intangibility of acts and so-called entrepreneurial situations and consequential results. Sometimes, the inability of the companies to generate results can lead to the abstraction of the entrepreneurship, as a strategic excuse of their managers. On the other hand, human talents must realize that, sometimes, their skills and competencies are stronger than the corporate walls.

## **The Human Point of View: The Need to Differentiate and Grow**

Adaptability is part of human history. The concept of resilience that comes from physics, in Business Administration, refers to the adaptability of the individual facing internal challenges and especially those from outside the company, referring, in this case, to action and positive reaction.

However, considering the need for differentiation and competitive positioning, companies and people should not only deal in a reactive manner with the market, but must create constant corporate and personal challenges that aim at anticipation and perpetuation, or at least more frequently, entrepreneurial, creative and innovative actions, which would lead to new business scenarios. Resilience, in fact, is usually associated with the individual's capacity to identify opportunities and solutions from adverse situations, adapting and organizing proactive actions, out of, among other practices, positive psychology as a form of corporate protection.

In the new economy, if that is how the post-crisis scenario that started in 2008 can be called; the main economic asset is not in physical resources or even in technology, but in people's minds and in how companies can identify and capitalize on the knowledge, actions, postures and attitudes of their employees. Davenport and Prosak (1999) point out that it is necessary to "recognize knowledge as a corporate asset and understand the need to manage it and surround it with the same care dedicated to obtaining value from other more tangible assets." (p. 14). And, to undertake, the individual not only must have the motivation to do something new or different, but to do it well done, so as to contribute financially and economically with him/herself, the company and society. Thus, the act of thinking in an entrepreneurial way must be accompanied by actions and procedures that comply

with the company as well as the society, since rights and obligations are created, generating an interrelation between the parties. This is the difference between a mere entrepreneur and a businessperson. The latter assumes legal and lawful responsibility with his/her internal (employees) and external (with its suppliers, for example) market, generating taxes that are reverted to the society, and often promoting technological growth. In addition, this is where entrepreneurship can communicate with innovative activities.

In Brazil, due to informal labor market particularities and in the sense of making it more formalized, there is the presence of the Individual Entrepreneur, who is the one who works alone and obtains a business legalization permit as a small businessperson.

The solo entrepreneur can direct his/her efforts to the so-called Creative Economy. The Ministry of Culture in Brazil, through Decree 7743, of June 1, 2012, created a Secretary for Creative Economy (*Secretaria da Economia Criativa SEC*): "with the mission of conducting the formulation, implementation and monitoring of public policies for local and regional development; giving priority to the support and encouragement of professionals, and to micro and small creative Brazilian enterprises." ([www.ministeriodacultura.gov.br](http://www.ministeriodacultura.gov.br))

Brazilian initiative is based on the tendency of the innovative idea of John Howkins (2001), in his book *The Creative Economy*, which discusses the possibility of individuals exercising their imagination in order to generate economic value. Thus, the creative economy involves the creation, production, development and distribution of products and services, based on knowledge, culture and creativity as productive resources.

According to the HSM Management magazine ([www.hsm.com.br](http://www.hsm.com.br)), the segment moves more than three trillion dollars a year, representing 10% of the world GDP and has socio-economic development as its main objective. It is found under the listing of creative economy, here in Brazil, from magazines that are strung up on string outside a newsstand and transformed into a tourist attraction, up to regional gastronomy.

The UNCTAD (United Nations Conference on Trade and Development) has studied and analyzed this business mode in the world due to its importance for social and economic development of nations, especially those developing ones.

Both the individual entrepreneurs, as well as those from the creative economy, allow for resource and income democratization, thus socially benefiting a region. They also serve as a means of technological innovations, seeing that they decentralize research and development and insert intangible motivation that is not always found in large companies.

The start-ups, so-called investor-angels, that apply resources, mainly in financial companies, have increased in Brazil in recent years, according to the National Conference of Angels of Brazil, which is a non-profit organization dedicated to entrepreneurship investment. It is the responsibility of the entrepreneur to go after these sponsor-angels.

In addition, business incubators are a strong reference of how good ideas can arise from market needs, being one of the most effective ways for developing new ventures. According to the Brazil site (<http://www.brasil.gov.br/empreendedor/primeiros-passos/incubadoras>):

in the country and in the world, statistics show that the mortality rate of companies that go through the incubation process is reduced from 70% to 20% in comparison with normal companies. The business incubator stimulates entrepreneurship in that it strengthens the companies in their early years of existence and prepares them to survive on the market. Another reason for a greater chance for the success of companies installed in an incubator is to grasp the best projects and select the most capable entrepreneurs, which then extends the possibilities for the success of these companies.

Incubators emerged in Brazil during the 1980s. They generally offer physical space, where companies are incubated, facilitating management, communication and a relationship between the parties. The early years, especially the first three, are essential for a new venture, because a lack of experience and knowledge of Administration can bring about numerous problems, especially in regards to the lack of working capital management, marketing, among other aspects. The definition given above refers to a traditional incubator, but still according to the Brazil site, there are the following types of incubators:

- **Technology-based Incubators**, offering research support, generating high value-added technology to products, processes and/or aggregated services. They can be linked to educational institutions, as well as to sponsorship from private companies.
- **Mixed Incubators**, home to both technology-based ventures as well as Traditional Sectors. In this case, one can focus on economic sectors, for gaining synergy, such as those related to information technology.
- **Social Incubators**, that support enterprises from social projects, which require sponsorship or even special development projects.
- **Cooperative Incubators**, harboring associational enterprises in the training and/or consolidation process.
- **Agribusiness companies, Cultural Companies and Design Incubators, among others** that attend specific business sectors that compose them.

Regardless of the type, incubators make a business more market-oriented, because they perform a natural selection, according to the apparent viability, aside from constructing indicators and management tools. This kind of initiative contributed to improving the survival rate of companies, calculated by the Organization of Economic Cooperation and Development (OECD). The modalities of incubators should contribute to new ventures that bring competitive advantage to the company, in order to compensate for differentiated investment advice.

## And the Innovations?

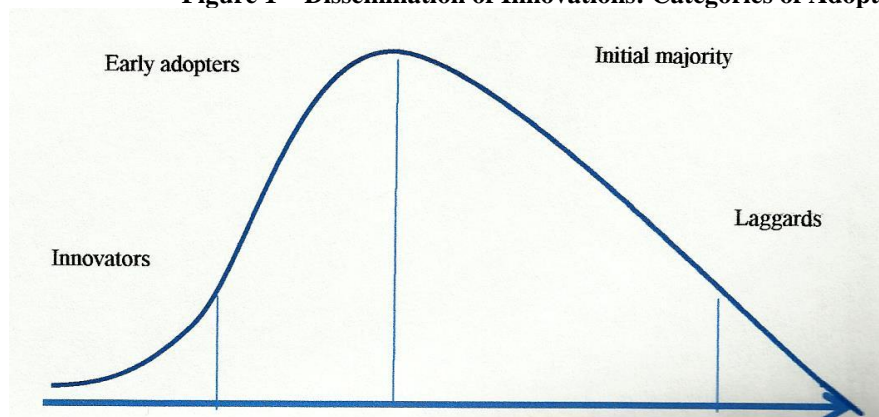
If there were no innovations, probably much of what we consume would not exist. Innovations can be defined as improvements in existing products, services, and occur in our business and personal daily lives. As an example, one can cite an English bank that, in the 1990s, faced legal difficulties to expand its branches in Brazil. In the search for process improvement, it made a strategic partnership with a Brazilian bank, outsourcing the checking accounts and the 8,900 employees of that English bank to the national bank. In fact, the idea of outsourcing the customers implicated in the resizing of the number of internal staff and enabled them to create isolated offices within the institution. As part of the strategy, the national bank handed over banking technology to the English bank and they in turn, offered international lines that increased the funding of the Brazilian bank for its customers. It is observed that activities need to be in connection with the business environment in which the company is inserted. Under the marketing point of view, the concept of diffusion of innovations can be used.

According to Semenik and Bamossy (1996):

The fundamental premise of this concept is that when an innovation is introduced into society, there will be a relatively standardized and predictable diffusion of that innovation through the society. The main elements of this diffusion process refer to the characteristics of innovation (product) and characteristics of adopters (consumers) who buy and use the product. (p.279)

An innovation is useless, unless it is applied on the market. Therefore, it is essential that its acceptability, introduction and development on that same market be planned.

**Figure 1 – Dissemination of Innovations: Categories of Adopters**



Source: adapted from Semenik & Bamossy, 1996, p.282.

It is noteworthy that, although the definition of the authors has a marketing slant, the application itself in society, as a whole, refers to the reflection of other factors such as industrial structure, technological level, education and teaching, for example. They are closely interconnected, whether from the point of view of the company, or from the point of view of the market. The perception of the usefulness and the complexity of the product can accelerate or decrease the acceptance and adoption of the concept time, depending on the characteristics of macro-environmental factors of where the company is located, as well as the intensity of the company's communication, in the sense of introducing and stimulating this new concept. By direct logic, Figure 1 categorizes four types of groups of people, from a psychographic segmentation:

- **Innovators**- are consumers who generally have higher purchasing power, social, education and cultural levels. They can be classified as experimenters and serve as reference models to other future consumers.
- **Early Adopters** – are those using the innovators consumption as a reference point; they consume by counseling (recommendation).
- **Early Majority** and **late majority**- represent those who adopt the behavior from other economic and social groups, from its popularization.
- **Laggards**- may be those consumers with possible rejection, skeptical or even without any interest in the proposed concept.

This classification of consumers refers to gradual innovations, and not radical ones, which are very relevant leaps that transform society, companies and individuals, such as the internet, for example.

**Figure 2 – Continuous innovation scale**

Incremental	Radical
<p>Extension of existing products or processes</p> <p>Well-defined product characteristics</p> <p>Competitive advantages in low cost production.</p> <p>Frequently developed in answer to a specific market need.</p> <p>Consumer stimulated.</p>	<p>New technology creates a new market.</p> <p>Innovation researched and developed in a laboratory.</p> <p>Superior functional performance when compared to "old technology".</p> <p>Specific market opportunity or arising from secondary worries.</p> <p>Stimulated by technological development.</p>

Source: Mohr *et. al.*, 2011, p.19.

Incremental innovations are those that represent the evolution of a pattern, and are perceived by the consumer as quality gain and usefulness of a product. They can occur in the most diverse segments. In the agricultural sector, for example, you can see a gradual evolution of planting and harvesting techniques, as well as for animal breeding and slaughter, or even on conservation and commercialization of the byproducts. Such an evolution was so clear and strong that in the 1980s the term *agribusiness* arose, a new perspective stemming from the dimensioning and management of agricultural and livestock activities. With the introduction of genetics and transgenic crops, agriculture suffered radical innovations, with perhaps more bruising results. In this way, innovations, whatever they are, should bring transforming results and changes to a society.

## And the Creative Aspects?

Creativity can be linked directly to marketing aspects relating to communication, advertising and marketing. Nevertheless, the concept is much broader, considering the focus lies on the individual and their particularities. Part of the creative process is related to the environment in which the individual is inserted and the possibilities of how the company can improve this environment by awakening and developing a creative genius in other individuals. In addition to undertaking and innovating, creativity can facilitate and optimize the changes and

transformations needed, combining efforts and resources. It can happen even in traditional and conservative companies, if the organizational culture is in accordance with the goals and corporate objectives.

According to Munhoz (2005):

Creativity is a human skill that can only be recognized and evaluated from the results it produces. This is a multiple faceted process and target of numerous definitions, due to the complexity of the concept that encompasses some of the dimensions: relative to the procedure, the characteristics of a creative person, the product that is created and the facilitating environment, or not, of the creation process. (p. 214)

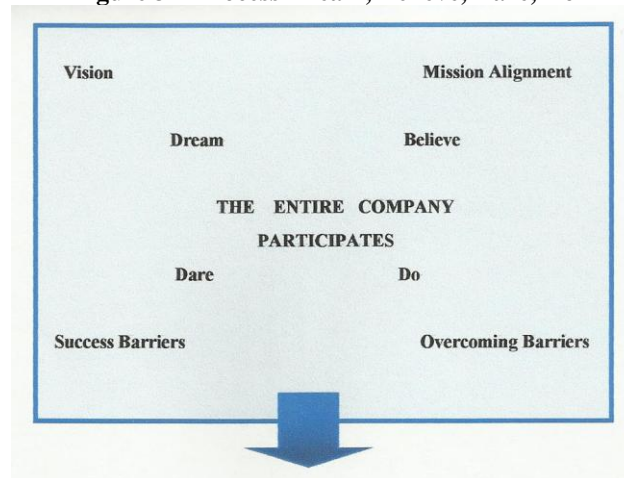
The dimension of creativity thus involves the individual, with his/her characteristics and peculiarities, fruit of his/her existence, experience and view of the world, in the environmental context in which it is inserted. On the other hand, it involves the business scope, which may offer the individual exogenous variables, motivating and leading him/her to a certain type of behavior that might then lead to building competence, creativity, and subsequently the needed results. There indeed lies a problem. Unlike the Advertising and Publicity area, where it is possible to measure the cost of the investment in creativity, other sectors may not have this possibility for measurement, aside from the financial results of the business. Hence, the creative process sometimes is confused in the daily business with the innovative process. Observe some examples that allow us a better understanding of this differentiation: one cannot apply the creative process in the development of a new drug, but there can be innovative technology in research, development and production. From the point of view of gastronomy, it is possible to use the food from the plate creatively, but under the prism of nutrition, it becomes dangerous, and may cause a health risk to the individual.

Capodagli and Jackson (2005) comment that:

There are two basic schools of thought on creativity in business. The first insists that researchers and other innovators be given the loosest possible network, to allow new projects and ideas to develop by own impelling force and with maximum independent decision-making. The second school requires that the reins be kept steady and that generating ideas is part of the corporate process and like other parts, it is carefully controlled. (p.122)

The authors' statement leads to another reflection. The company manages to, in its strategic plan, invest in innovative human capital in their budget and, subsequently, in the management and control of the results, but not in the creative aspect, that stems from the subjectivities, without allowing for the prediction of results.

**Figure 3 – Process Dream, Believe, Dare, Do**



Source: adapted from Capodagli & Jackson, 2000, p. 165.

Thinking in this way, both entrepreneurship and creativity should be encouraged by the company in order to awaken the abilities and skills of their particular workforce. For the innovative process, you can insert the procedures and actions in a more objective plan. In relation to creativity and innovation, practices should be carried out from concrete results.

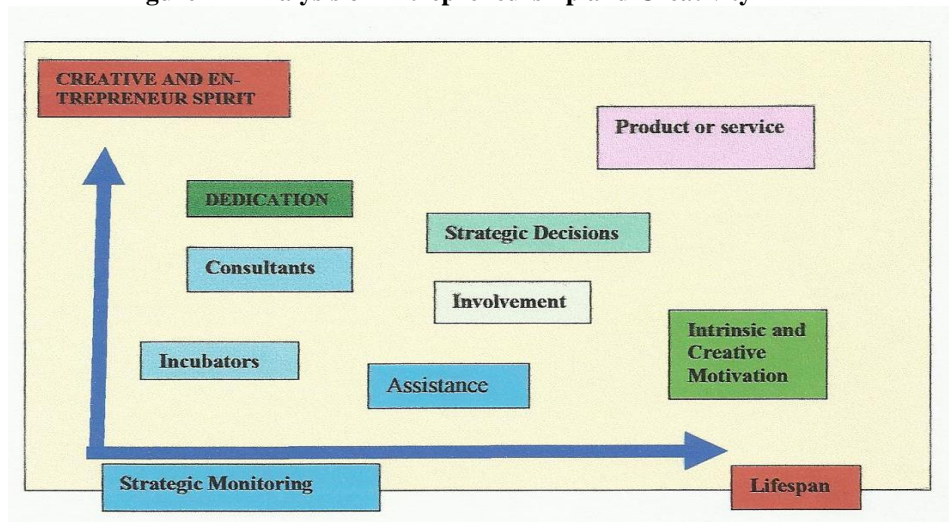


## The Necessary Human Skills

It is possible to affirm that individuals have characteristics, qualities, skills and competencies, without the necessity of going deeper into Psychology:

- Features refer to the physical aspects of a person. Individuals may be tall, short, thin or over weight, among other physical aspects that do not (or at least should not) interfere in the actions of a person.
- Qualities are virtues that exist and are recognized by other people. Therefore, a certain individual can have good communication skills, which can bring about an important differentiation for that person within a social group.
- Skills refer to the process of how to do something. Thus, an individual can speak a language well, perform tasks and behave according to standards and procedures.
- Competencies are related to results. Therefore, people can use the language as instrumental in persuasive negotiation, as well as leading a group of competent individuals to obtain more synergistic results.

**Figure 4 – Analysis of Entrepreneurship and Creativity**



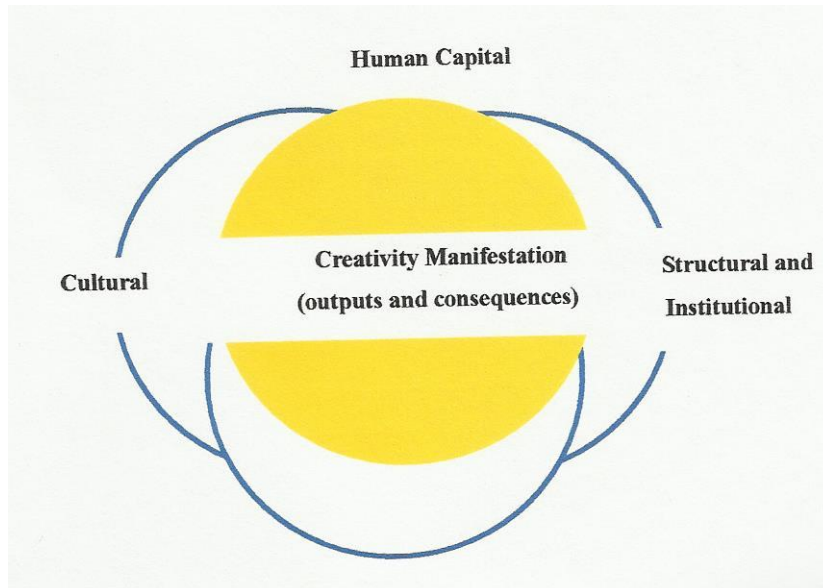
Source: Author.

The level of involvement and commitment of an individual can be related to several factors, such as his/her professional life cycle, the life cycle of the company, as well as the aspects related to self-assertion and a need for overcoming challenges. Depending on the actual situation, an individual may be more prone to entrepreneurial and creative activities and the consequential level of results. Depending on the degree of maturity, an individual may look for more challenges and consequences.

Analyzing figures 1 and 4, in conjunction with the theory of life cycle proposed by Geus (1999), one must diagnose the moment of the company as well as their employees, contextualized with the environmental in which the company is inserted. Depending on the diagnostics results, one can take certain actions and strategies to maintain the consistency of the company's resources – in this case, represented mainly by human capital, to maintain the sustainability of the business.

In fact, the environments conducive to changes can be highly fertile for challenges, but the challenges can be endogenous, being part of the characteristics of the individual.

**Figure 5 –Consequences of Creativity**



Source: Adapted from the United Nations ([http://unctadxi.iii.org/en/SessionDocument/ditctab20103\\_en.pdf](http://unctadxi.iii.org/en/SessionDocument/ditctab20103_en.pdf))

For skills development, it is possible to identify what skills are required and how to promote actions aiming at developing them. According to the Foundation for Leadership and Learning, the skills can be categorized as:

**Table 1 – General and Specific Skills**

General Competences	Specific Competences
<b>Personal and Educational</b>	<b>Accept moral postures, ethics and those of social responsibility. Utilize teaching and learning theories and strategies.</b>
<b>Interpersonal</b>	<b>Valorize people's development. Develop interpersonal communication and relationships.</b>
<b>Organizational</b>	<b>Implant changes, create and innovate. Promote organizational development.</b>
<b>Cognitive</b>	<b>Know the fundamentals and theories for leadership. Research and analyze data. Manage formation and generate knowledge.</b>
<b>Professional</b>	<b>Solve problems and make decisions. Undertake and administrate. Plan and implant projects.</b>

Source: adapted from The Foundation for Leadership and Learning ([www.tfl.org](http://www.tfl.org))

In the same way as the Foundation for Leadership and Learning relates directly to leadership skills, several authors converge on similar categorizations. Therefore, for a better understanding of that which is in discussion, we adopted here the referred categorization as a reference for the contextualization of enterprising, creating and innovating.

We notice that the categories of the competencies cited act in a unique and complementary manner, so that each individual can choose between groups of general or specific skills. A financial administrator might, for example, to be able to carry out his functions well, have a cognitive, interpersonal, organizational and professional skills group to enable him to achieve the expected results. A doctor may have, on their list of competencies: interpersonal, cognitive, personal and professional. In this way, it is up to each individual to identify which skills they need to achieve their personal and professional goals.



## Entrepreneurship, Creativity and Open Innovation

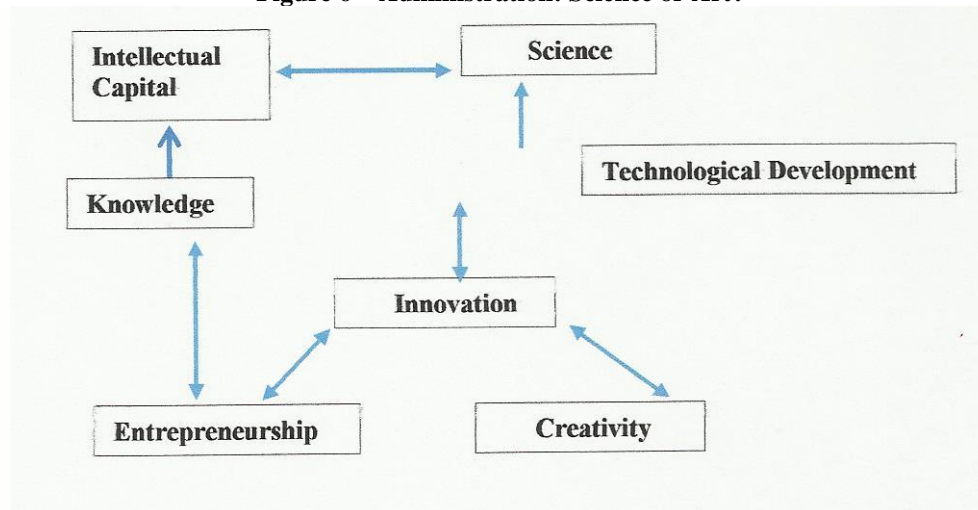
Both competences and skills can be developed from stimuli and external influences, such as the environment in which one lives, the company and the teaching environment.

We can affirm that human skills can also be those related to entrepreneurship, creativity and innovation, as long as they bring contributions to someone. However, the management of the processes is of fundamental importance for results to be achieved.

One of the ways of getting results that are more consistent is to manage the company in order to diversify the structure of these talents by hiring individuals with different skills from those that the company usually has on its workforce. Another point is the conciliation of the Personal Life Cycle with the corporate goals and objectives –a stage where the manager should have the ability to administer him/herself and delegate this decentralization of power to his/her peers and subordinates. However, one of the biggest challenges for the incorporation and acquisition of these skills is working with processes of changes and gradual transformations. In addition, one of the most difficult is habit changes, be they corporate or personal. Habits often reflect the personality and way of being of the individual and are hard to disengage oneself from them. Under the corporate point of view, the cost of the changes can be evaluated through management criteria and indicators.

In short, there will be no entrepreneurial capacity, if there is not the proper competence. Innovation will not be possible, if there is not an enabling, planned and organized environment for its development. There will be no room for creativity, if there is no will on the part of the individual. Finally, if there is no will to grow and develop, no creative or innovative entrepreneurial activity will be able to emerge, in a contributive manner for society as a whole. There will be only good answers to our questions and everyday longings from the differentiated manner in which we question our view of the world.

**Figure 6 – Administration: Science or Art?**



Source: Author.

The science of administration, as highlighted at the beginning of this article, covers different areas such as Logistics, Finance, Production, Personnel Management and Marketing. The company, with the participation of its employees, can find its continuity and longevity by means of process management and indicators, which make it possible to organize and plan the use of resources and organizational actions.

In conducting the company's path, it is necessary to use the competences mentioned, in order to make the administration more than a set of rational processes, which they must manage, but rather a business modeling in a more skilled and intimate manner, transforming science into a model of art.

To demonstrate that Administration is not only an exact science, but that it comes from several other applications and knowledge based on reasoning, analysis and qualitative interpretations, human purposes, a series of examples showing such practices as states of art are presented.

**Case 1** - This case study summary was constructed from experiential and historical life of the author. It was developed for use in the classroom and addresses issues of endogenous and exogenous motivations. In a department with 50 employees, only one of them exercised his/her activities in a normal way, with no differential. Faithfully fulfilling all activities in a six-hour shift, established by the company. At the end of the year, the company offered a bonus amounting to a salary, to be divided among the 10 best evaluated. When they changed the manager, the professional who took responsibility negotiated an increase of financial resources with the Board and remade the bonus distribution policy, making it understood that, each one of the employees had responsibility over the outcome of the Department. Then, at the end of the year, they all received the award, including the employee mentioned above, who came in last place, but for the first time received a symbolic gratification of 10% of his salary. After this award, this employee changed his behavior, participating more actively in the work, including suggesting changes in his activity, becoming one of the most prominent in the department.

**Case 2** – This case study was developed from the author's experiential and also developed for use in the classroom, addressing issues relating to endogenous and exogenous motivations. A certain English multinational established in Brazil, had a program for selecting trainees open to employees as well as the public. They offered it once a year, with the goal of identifying 16 young graduates, for two years of training to take over the sub management units of the company. The screening program involved nine stages and those approved should accompany executives with vast experience in their daily work, in branches all over the whole country.

A particular employee, quite motivated, enrolled in the selection program for three consecutive years, and was able to reach the third step of the process. He tried for the fourth time, but failed to mention on the chart that he was a company employee. The next time he was able to go to the eighth selection phase, but failed in the last (ninth), which was carried out internally - remembering that different companies had carried out the previous steps externally. From then on, he realized that the selection program was biased towards its employees and they offered it as a way of motivating the team, but at no time was it the company's goal to select employees as trainees. After this situation, he became demotivated and started looking for other opportunities on the market. After 10 years of selecting trainees in this way, they discontinued the program because they noticed that most of those who were accepted, after training, were co-opted by the competition with better jobs and salaries.

**Case 3** - In 2011, the Japanese came Case study developed from reports in print, electronic and interactive media for showing the importance of cultural differences in entrepreneurship.. under the aegis of a catastrophe, as a result, possibly from cooling failures in nuclear power reactors based on Fucushima. A similar event, such as that in Chernobyl in 1986, could have happened, generating a worse scenario than that faced by the country in World War II. However, the different external features and technologies offered by the United States of America and European countries led to a reduction of aggravating possibilities which could have occurred in the short term. Japanese economy has a considerable GDP and GNP, with a part of their companies based outside Japanese territory. For the first time, they considered the possibility of the non-existence of a national territory because of the leak, which could have made it uninhabitable. However, as human and financial resources assets were outside this territory, it was up to the government to find a new form of management to govern the population. Thankfully this fact did not occur. Nevertheless, worthy of distinction was the subservience of the population before the country's Government, which considered that there should be a need for maintenance planning and subsequent economic and social growth. The predictions are that the Japanese economy will start to grow and achieve a level better than before the crisis. An important aspect, the cultural, calls the attention of our Western outlook. We refer to the episode of the mobile hot tub, offered by the soldiers of Japan's Defense Force to the population of the worst affected areas (Ofunato and Rikuzentakata), aiming at easing the people's suffering while facing those difficulties, as well as, improving their self-esteem and motivation. It should be noted that economic and cultural diversity are important factors in the chain reaction of actions, because behaviors are molded from the environment.

**Case 4** - \_Case study developed from interviews with company managers as well as documentary sources for presentation on the relationship between entrepreneurship and international marketing . The candy

market in Brazil, in the 1960s, was dominated in the candies segment by two brands: *Juquinha* and *Soft* candies. With low competition and a stable and expanding consumer market, one would hardly consider repositioning the product and searching for an external market. *Juquinha* candies, however, is one of the good examples of that a visionary company can grow and expand their sales, by means of sales repositioning ([www.juquinha.com.br](http://www.juquinha.com.br)). When it was founded in 1945, it produced cold drink powder and in the following decade, it began producing candies with a difference: fruit flavors. In the 1980s, as the leader in the domestic market, it began to export to the United Arab Emirates and the United States of America, where the candies are regarded as *premium* products. In this way, two-thirds of its current production are committed in sales to about 50 countries and the remainder on the domestic market, where competition is fierce and the population does not consider a candy with differential as a competitive advantage. In other words, from the market viewpoint, the company sought, in an enterprising manner, the international market via direct export, as the primary entrance and operational strategy in international markets, ensuring their survival and future sustainability. Without this, the company probably would have great difficulty in fighting for the domestic market at present. In this way, one understands the importance of entrepreneurship, creativity and innovation on the international scene, where successful practices depend essentially on how the company and people interpret, analyze and put into practice the international marketing actions.

## CONCLUSIONS

The importance of the science of Administration may be perceived through its contribution to the companies. These develop an important social and economic role as catalysts for private and public resources. Through labor and taxes, companies contribute significantly and their longevity ensures the sustainability of the entire social system. There is no social without economic and financial contribution, but there may be economic without the social. Thinking in this way, companies need to contribute part of their resources to the society, through its perpetuation, inserting the systematic entrepreneur, innovative and creative way of thinking. With such ideologies, the company can democratize job opportunities and financial resources, creating and stimulating different challenges entrepreneurs.

The process of undertaking, creating and innovating can occur from need and/or opportunity. If individuals can enter it into their daily lives, they will have more success than those who only practice actions from external stimuli. There is no purpose in having goodwill and creative ideas if there is no space or even a competent business model that can absorb them successfully.

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# THE TRANS-PACIFIC PARTNERSHIP: NEW EMPHASIS FOR UNITED STATES GLOBAL ECONOMIC RELATIONS

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## ABSTRACT

*The Trans-Pacific Partnership represents the latest international development program based upon regional integration, otherwise commonly known as a Free Trade Area [FTA]. The proposal, which encompasses nations of North and South America as well as a significant number of nations stretching from Asia to Australia and New Zealand. The purpose, as with all similar FTAs, is to lower and even eliminate tariffs and other types of artificial barriers to trade in the belief that freer trade will enable all member states to develop their most significant industries and thus raise living standards for their populations at-large. However, controversy has arisen over various aspects of the proposal, and debate continues over its acceptance and final form. This paper offers an examination of the various sides of the issue of the development of the TPP.*

**Keywords:** Trans-Pacific partnership, global economic relations.

## INTRODUCTION

Globalization or some other form of international trade has been a main component of the foreign policy of most of the world's nations since the end of World War II. As I noted in a paper delivered at the Midwest Political Science Association in April (Le Veness, 2014, p. 1), many of the international organizations founded during that post-war period, following the tradition of the League of Nations and its successor, the United Nations, had as their basic aim the restoration of peace to a world so badly torn apart by war. I cited Joseph S. Nye (1971), who in a book published over forty years ago, noted that "[c]ritics as well as policy-makers saw regional organizations as important devices for peace" (p. 4). Clearly, international organizations also arose which were designed to foster international economic growth and integration which would lead to "the formation of a regional transnational economy...[and]...considerations of welfare and considerations of interdependence (Nye, 1971, 27).

### Regional Integration

As cited in Nye, Bella Balassa (1961) created a series of terms for the steps of integration which lead to both its deepening and widening. As I wrote in the MPSA paper (Le Veness, 2014)

They include the simplest, the Free Trade Area, which eliminates tariffs and quotas, a Customs Union, which additionally creates "Common External Tariffs" (CETs), "Common Market," which adds a "free flow of factors, an "Economic Union," which adds "harmonization of economic policies," and finally, "Total Economic Integration," which includes "Unification of Policies, Political Institutions" (Le Veness, p. 1 citing Balassa in Nye, p. 29). Others, particularly at present, might refer to the last category.....[as].....an Economic and Political Union (p. 1).

Specific examples of such organizations might well include both the North American Free Trade Association (NAFTA), of which for over two decades Canada, Mexico, and the United States have held membership and the Caribbean Community and Common Market (CARICOM). In the former, the treaty was

signed “creating the largest free trade region in the world, generating economic growth and helping to raise the standard of living for the people of all three member countries. By strengthening the rules and procedures governing trade and investment, the

Nafta has proved to be a solid foundation for building Canada’s prosperity and has set a valuable example of the benefits of trade liberalization for the rest of the world (Canada, Foreign Affairs (2013), “NAFTA,” 24 December). That same release added, “NAFTAS has benefitted North American businesses through increased export opportunities resulting from lower tariffs, predictable rules, along with reductions in technical barriers to trade.” As to CARICOM, its earliest forms were created as an FTA by the Dickenson Bay agreement of 1965. The members’ benefits were to include: (a) to promote the expansion and diversification of trade in the area of Association; (b) to secure that trade between Member Territories takes place in conditions of fair competition; (c) to encourage the progressive development of the economies of the Area; (d) to foster the harmonious development of Caribbean trade and its liberalization by the removal of barriers to it” (CARIFTA Charter, Art. 2). This was supplemented by the Treaty of Chaguaramas of 1974. As I stated in a GBATA presentation in 2013, this agreement offered greater strength to the Community with regard to integration, its promotion and its regulation, which “included a free trade area among members, unified economic policy with regard to other global trading partners, free movement of labor and capital within the region, innumerable social services, from weather forecasting, to shipping, to continuing and higher education, and the like” (Le Veness (2013), p. 539). I also cited Bauman (2008), who wrote that CARICOM’s principal objectives concerned its ability “to promote economic integration of member countries by means of a common market, coordination of a common external policy and functional cooperation in terms of health, education, culture, communication, and industrial relations” (p. 6, cited in Le Veness, 2013, p. 539).

There is no question but these types of organizations of integration which have been created throughout much of the world have proven quite controversial. There is considerable question concerning their viability, the disruption they cause to various sectors of national economies (here one might consider David Ricardo’s principle of Comparative Advantage), and the entire issue of their success in economic and other forms of development, to say nothing of, in perhaps some instances, their very viability. Nevertheless, it is important to examine their principles as the TPP clearly falls into this category of economic and additional forms of integration.

## Global Integration

A second form of integration, of course, is that which is conducted on a virtually world-wide basis. This would specifically include the post-World War II General Agreements on Tariffs and Trade, the original form of which was modified by various “Rounds” such as the Uruguay Round, and others. The WTO, established in 1995 and headquartered in Geneva, Switzerland, seeks to lower tariffs and quotas on virtually a world-wide basis, and also comprises enforcement mechanisms which encourage compliance by members to the rules governing such international trade. As was noted by former WTO Director-General Pascal Lamy the organization provides an opportunity for

For negotiating agreements aimed at reducing obstacles to international trade and ensuring a level playing field for all, thus contributing to economic growth and development. The WTO also provides a legal and institutional framework for the implementation and monitoring of these agreements (to which only some WTO members are parties (WTO, “About WTO,” website).

The Organization claims and between GATT and itself, there has been established “a strong and prosperous international trading system, thereby creating an unprecedented period of international economic growth” (*Ibid.*). Its “founding and guiding principles remain the pursuit of open borders, the guarantee of most-favoured nation principle and guarantee of non-discriminatory treatment by and among members, and a commitment to transparency in the conduct of its activities (*Ibid.*).

Considerable disagreement arises about this type of global economic growth endeavor. Once again, transparency has flared, but in addition, there have been issues of unfair economic advantage going to the more developed nations (which I term the North after Willy Brandt’s famous study for the United Nations), unequal

access to, even to meetings, and much more. Nevertheless, this does represent a very important, indeed urgent, form of international economic integration.

Controversy continues concerning which type of integration, regional or world-wide, is the most beneficial, and of course, the answer to that question very much lies in the term “to whom?” There are advocates and critics of both types of integration, and clearly transparency is one issue which has come to the fore with regard to both types. This type of discussion is, of course, beyond the scope of this present study. However, what this study will examine is the formation of a brand new, and both geographically and economically, extremely large proposed organization of regional integration which encompasses nations already engaged in regional integration with smaller groups.

## **THE ORIGIN AND STATE OF THE TPP**

The TPP originated in 2005 when an agreement was signed to form an organization which became named the Trans-Pacific Economic Partnership, with membership from Brunei (Negara Brunei Darussalam), Chile, New Zealand, and Singapore, sometimes named the P4. Additional aspects covered environmental protection and conditions of labor. At the time, the Prime Minister of New Zealand, Helen Clark, noted “this is a high quality trade agreement of strategic and economic importance to New Zealand. It provides for the elimination of all tariffs among the four countries, a feat not often achieved in trade agreements.” The Prime Minister added, “It builds a strategic partnership for New Zealand with three other open and dynamic economies.” (“FTA signed...,” website). In a statement released by the Ministers of the four nations, the new agreement was stated to deliver:

- A comprehensive agreement on trade in goods, whereby more than 90 percent of total trade among the four parties will be duty free on implementation;
- Trade facilitation aimed at reducing transaction costs relating to sanitary and phytosanitary measures, standards and conformance and customs procedures;
- A liberalizing framework that will encourage trade in services among the countries;
- A commitment from the parties to ensure that companies from other Parties to the Trans-Pacific SEP are able to compete on an equal footing with domestic suppliers for government procurement contracts, above certain thresholds;
- Cooperation between the four parties on competition and intellectual property rights;
- The provision of a framework for collaboration in strategic areas such as innovation, research and development (NZ Ministry of Trade, 2005, p. 1, website).

Membership was encouraged from other nations, and by 2008, the United States, during the administration of President George W. Bush, had expressed an interest in participating in such an arrangement. It follows in line with a statement by Secretary of State James Baker who cautioned the nation against permitting “a line to be drawn down the middle of the Pacific” with the implication that the U.S. would, indeed, remain on its side of that divide (quoted in Barfield and Levy, 2009, p. 1). That was followed by the creation of the Asian Pacific Economic Cooperation agreement, the aim of which is to “promote sustainable economic growth and prosperity” within its area (APEC, Mission, website). As such, it fosters “free and open trade and investment, promoting and accelerating regional economic integration, encouraging economic and technical cooperation, enhancing human security and facilitating a favorable and sustainable business environment (*Ibid.*). It was created in Canberra, Australia in 2008 by twelve members, including the United States, and by 2014 had received the accession of a total of twenty-one (21) nations (APEC, History, website). The administration of President Barack Obama informed the U.S. Congress in December 2009 that it intended to continue negotiations to formalize and finalize the TPP. Since that period, a considerable number of additional nations have displayed interest in joining the discussions, very importantly, including Japan. Others include Malaysia, Canada and Mexico (the NAFTA partners of the U.S.), New Zealand, Vietnam, and several Latin American nations, with probably more to come.

It is interesting to note that at a recent (2013) leaders’ conference, APEC voted to support the successful conclusion of the latest Doha Round of the World Trade Organization (WTO) (APEC, History, website), an effort has been supported by President Barack Obama (Barfield and Levy, 2009, 1). It is in this

context, with the significant number of regional trade agreements already in place in Asia and between the United States and some TPP members, that the Trans-Pacific Pact was born.

It has been claimed that the TPP, while yet another regional FTA, has two specific urgent features: “it is a relatively sophisticated agreement, and it is explicitly welcoming to new members” (Barfield and Levy, 2009, p. 2). The reality is that the United States is faced with increasing Chinese economic, to say nothing of other types of activity, in the Pacific region, and there can be little doubt but that participation in a trade agreement such as the TPP significantly could enhance America’s economic standing in the greater Asia area. As Meredith Kolsky Lewis (2010) points out, “the TPP resents the United States with a welcome opportunity, not only to participate, but also to take a leadership role in establishing the terms for a region-wide agreement” (p. 27). It might further be noted that over recent years the United States has developed quite a number of FTAs with countries throughout the globe, but that this would be one of, if not, the largest. It must be remembered that it will include all three of the NAFTA nations. It might be noted that it has been reported that China “is pressing for a vast Asia-Pacific free-trade agreement.....as a rival US-led deal that excludes the Asian giant has yet to reach agreement.” That nation is studying the feasibility of creating the Asia-Pacific Free Trade Agreement (FTAAP) (“Beijing.... website).

From the Asian-Pacific perspective, it has been noted that there are three serious motivations propelling the drive of nations of that region to seek further regional integration. As noted by Bergsten and Schott (2010):

- A reaction to the Asian financial crisis of 1997-98 and the desire to develop regional responses to regional problems
- The lack of progress in the Doha Round of multilateral trade negotiations in the World Trade Organization (WTO), which led Asian countries to seek trade liberalization through their own institutions
- A desire to emulate the United States and offset discrimination against their exports resulting from the North American FTA (NAFTA) (p.1).

Those same authors note that that “the Asian countries have prioritized economic integration within East Asia rather than within the World Trade Organization (WTO) or the Asia-Pacific Cooperation (APEC) forum.” They predict that “within the next few years, it is likely that the East Asian countries will deepen their economic ties and conclude both a regional trade agreement and a monetary agreement.....*These countries are well on the way toward creating an Asian bloc, a development that could ‘draw a line down the Pacific’ by discriminating against US exporters and investors and by excluding the United States from important regional economic and security forums (Ibid, pp. 1-2).*

The Obama administration has also engaged in bilateral trade deals, as for example, the recent agreement with The Republic of Korea which “is expected to increase trade between the two countries by billions of dollars and create tens of thousands of jobs for each” (Gordon 2012, on line). However, Bernard K. Gordon has concluded that despite the fact that the Doha Round of the World Trade Organization has been unable to complete its work despite years of effort, and that other bilateral packages have been recently concluded with several Latin American nations, the bilateral approach doesn’t offer much promise. The passage of...[the 2011]...deals ended a five-year standoff between, on the one side, most Republicans in the House of Representatives and pro-trade advocates in the business community and, on the other, House Democrats, most unions, and U.S. car producers, which fought particularly hard against the deal with South Korea due to long-standing restrictions against U.S. car sales there. After a difficult process of lobbying, wrangling, and compromise, the Obama administration has little stomach left to attempt another bilateral deal (*Ibid.*).

Which brings us to the Trans-Pacific Partnership itself. At a meeting of the above-noted Asian-Pacific Economic Cooperation (APEC) in Honolulu, Hawaii in November 2011, the delegates sought to continue to evolve an agreement which “potentially could eliminate tariff and non-tariff barriers to trade and investment among the parties and could serve as a template for a future trade pact among APEC members and potentially other countries (Congressional Research Service (CRS), 2013, Summary, p. 1). Apparently there was hope for agreement by the end of last year, but that did not come to pass, as was made obvious by the Ministerial statement issued after the meetings in Singapore on 07-10 December:



For all TPP countries, an ambitious, comprehensive and high-standard agreement that achieves the goals established in Honolulu in 2011 is critical for creating jobs and promoting growth, providing opportunity for our citizens and contributing to regional integration and the strengthening of the multilateral trading system. Therefore, we have decided to continue our intensive work in the coming weeks toward such an agreement. We will also further our consultations with stakeholders and engage in our respective political processes (Office of U.S. Trade.....2013, website).

It is, however, extremely interesting to note that in addition to its economic concerns and interests, the United States has additional “strategic interests. As was noted by Meredith Kolsky Lewis in 2010, this nation clearly sees opportunities beyond the eight current parties, and hopes that more countries will join the TPP. Although the current TPP partners are not major trading partners of the United States, APEC as a whole represents a huge market. Therefore, the TPP makes a good deal of strategic sense for the United States so long as it continues to expand. Nevertheless, the reasons go beyond the long-term economic potential of a Free Trade Area of the Asia-Pacific; the reasons also include a significant geopolitical component. In particular the United States has the potential to alter some of the economic power dynamics in the Asia-Pacific, which is consistent with President Obama’s stated goals of increased U.S. engagement in the region” (p. 37).

Lewis (2010) concludes, “An expanded TPP could lead to a different path toward Asian economic integration, which would have neither ASEAN nor the three major East Asian economies as its driver, and which would instead have the United States as a central participant” (p. 39, citing Barfield and Levy).

Meetings have continued to date. In this extremely comprehensive proposal, the U.S. seeks “market access for goods, services, and agriculture with countries with which it does not currently have FTAs: Brunei, Japan, Malaysia, New Zealand, and Vietnam. Negotiations are also being conducted on disciplines to intellectual property rights, trade in services, government procurement, investment, rules of origin, competition, labor, and environmental standards and other issues” (CRS 2013, Summary, p. 1). Additional items being considered are of particular interest. For example, it has been claimed that some rules may turn out to be more “rigorous” than those in the WTO agreement, and “[s]ome topics, such as state-owned enterprises, regulatory coherence, and supply chain competitiveness, may break new ground” (*Ibid.*). It might well be noted that this same report indicated that significant changes in the economic endeavors of a number of participating countries.

From the standpoint of the United States, the Obama Administration has made it clear that it seeks increased presence and trade in the Asia-Pacific region, which will lead not merely to enhanced trade relations and perhaps improving balance of trade relationships, but will also serve to bring the various free trade areas into a more regularized scheme, and increasing number of nations who accept membership in the Trans-Pacific Partnership (*Ibid.*).

It has been suggested by Bergsten and Schott, based on comments on U.S. Trade Representative Ron Kirk’s December 2009 presentation, that the agreement should “‘create a potential platform for economic integration across the Asia-Pacific region,’ expanding US exports and advancing US economic interest with the ‘fastest growing economies of the world.’” In 2010, however, they cautioned that the “current TPP participants are not among the fastest growing economies in the world. Nor are their economies sufficiently large to offer major new opportunities for US traders and investors that go much beyond what we already have under existing FTAs.” Very importantly, they conclude “The US payoff thus depends on extending the TPP to other major economies of the Asia-Pacific region, starting with Canada (and probably Mexico) in the very near future and hopefully adding Japan within the next year or two ( *Ibid.*, p. 2, their quoted material from Ambassador Ron Kirk). Finally, they agree that based on the U.S. (and Ambassador Kirk’s expressed) expectation of the new FTA, “the agreement envisioned would update and augment provisions in existing trade pacts and add new obligations on “environmental protection and conservation, transparency, workers’ rights and protections, and development.” These, of course, far-exceed those agreed to by President Bush and Congress in 2007 and which have been incorporated into other agreements with Asian-Pacific nations. (*Ibid.*).

The addition of strong economies with close trade ties to the United States cannot be overemphasized, as they lend enormous economic strength to the partnership and to regional development. It has been stated that the originators of the TPP actually have a relatively minor impact on world trade and the world economy. For example, they “account for only 0.8 percent of the world gross domestic product (GDP) and 2.2 percent of global

trade” (Barfield and Levy 2009, p. 2 citing IMF and WTO figures). However, resuming the entrance of Japan and South Korea, and that their accession apparently is quite vital to the success of this entire endeavor from an American viewpoint, it has been reported that all of these nations produced “\$1.5 trillion worth of trade in goods in 2012, and \$242 billion worth of services in 2011. They’re responsible for 40 percent of the world’s GDP and 26 percent of the world’s grade. That makes it [the TPP] roughly the same size as the Trans-Atlantic Trade and Investment Partnership, another huge trade agreement that got rolling this past summer” (DePillis 2013, p. 1). Gabriella Chan (2013) of *The Guardian*, added that Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam “have a combined gross domestic product (GDP) of US\$28.136bn on 2012 figures, which represents almost 40% of the world’s GDP. Australian trade within the TPP countries represents A\$214.224m (website). In a recent editorial, *The Washington Post* (2014) emphasized the vital importance of Japan’s entering into agreement with the TPP. However, there are complications. The editorial noted:

That the TPP members had to reach agreement with Japan in order to “reap these strategic benefits.....As a practical matter, that means that everyone is waiting for a “yes” between Washington and Tokyo, the two biggest economies in the group, and the two with the most divergent approaches, historically, to trade. When Japanese Prime minister Shinzo Abe agreed last year to pursue a TPP deal, he seemed to be making an historic decision to open his country’s long-closed domestic markets – not only to satisfy long-standing U.S. complaints about Japanese protectionism but also to subject Japan’s stagnant economy to the bracing effects of competition (“U.S. and Japan...,” 21 April, website).

However, despite President Obama’s best efforts, he came away from the April 2014 visit to Tokyo without any firm agreement with the Japanese concerning the TPP. As stated in *The New York Times* (2014), “Mr. Obama had hoped to use his visit here to announce an agreement under which Japan would open markets in rice, beef, poultry, and pork” (Landler and Rudoren, website) which is a pre-condition to further steps toward Japan’s acceptance of the TPP program. However, Abe was unable to provide that due to stiff pressure from Japan’s agricultural sector. However, that same report indicated that the president’s advisors had stated that a “pathway” had been achieved, whatever that means, toward future negotiations. The Minister of Trade for Japan, also indicated, “We are moving toward a conclusion” (*Ibid.*). That same article suggested that it would have been better if Mr. Obama had first received authorization from Congress before presenting plans to the Japanese, who, without such, may have been reluctant to commit to a deal which might never pass through the U.S. legislature. Reuters reported that although a U.S. official indicated that there was a “breakthrough” with regard to “market access,” it was also stated that “There are still deals to be worked out. There is still much to be done.... We do believe we have a breakthrough in our bilateral negotiations” (Sieg and Spetalnick, 2014, website). *Kyoto News International* (2014) added that what the two nations had been specifically dealing with were five agricultural areas, “rice, wheat, beef and port, dairy products and sugar,” and, additionally “automotive issues” (“Japan, U.S. Yet...website).

That may well be true, but I must refer to Takashi Terada’s article written in 2012, in which it is concluded: While the stakes for both Washington and Tokyo in Japan’s potential entry into the Trans-Pacific Partnership are high, the prospects remain unclear. Opponents of Japan’s participation, led by the agricultural industry in Japan and the auto industry in the United States are powerful, and the political schedules and priorities of the administrations of both countries to not present a notably positive environment for Japan’s early succession to TPP. At the same time, Japan attempts to chart its future after 20 years of sluggish growth and one year after the March 11 disaster, and as the United States moves to enhance its position in the Asia Pacific, the broader interests of both countries would be advanced by Japan joining the TPP (p.5).

During the President’s visit to the Republic of Korea [South Korea], after he left Japan, the President Park Guen-hye of Korea, noted that “Another important pillar of our alliance is practical cooperation in economic, social and cultural sectors.....We plan to expand mutual beneficial cooperation based on KORUS FTA [Korean-U.S. Free Trade Area]. We share the view that, followed by FTA, the two countries, TPP will enable both of our countries to expand our cooperation in the future. We will closely coordinate with each other regarding Korea’s participation in TPP” (U.S. Embassy, 2014, website).

Expansion seems inevitable, with a number of additional nations expressing interest, if not already agreeing to becoming part of the negotiations. However, it remains to be seen how quickly, or possibly, even if some of the potential major players join the team.

## OBSTACLES AND OPPOSITION

Any number of obstacles face the creation of the Trans-Pacific Partnership, some of which, such as membership by Japan and Korea, have already been considered above. Clearly additional obstacles include the eventual scope of the agreement, dealing with the unevenness of the development of its various members, and, reaction of the People's Republic of China. There appears little doubt but that one of the goals of the TPP is the limitation of economic power and expansion by China in the Pacific region, and that the organizations represents, by not offering membership to China, an attempt to counter-balance its power, meanwhile strengthening that of, among others, the United States.

An additional obstacle for the Obama administration is, as is indicated above, the fact that Congress is simply not on board with regard to the TPP. President Obama proceeded to Asia in April despite his lack of Congressional authority to conclude trade deals, and quite frankly, with considerable opposition from members of Congress of both political parties, Democrats as well as Republicans, to such an agreement (because of its contents and perceived effects on the United States economy, not necessarily because it is sanctioned by President Obama). Members of Congress have questioned which nations should be accepted for membership. There are issues such as “what constitutes ‘high-standards’ in such areas as worker rights, intellectual property rights, protection for pharmaceuticals, and investor rights. In addition some members...have expressed an interest in broadening the negotiations to include issues such as exchange rates, which the Administration acknowledges as important, but has to date preferred to address through other venues” (CRS, 2013, p. 53). To sum it up, “What seems to be happening now is that the TPA concept is being radically altered. The Congress is not content to let the Obama team go ahead without direct Congressional supervision of the talks. This reflects Obama’s apparent inability to manage things with Capitol Hill” (Herman, website).

*The Washington Post* (2013) has considered other issues of significant controversy include protecting intellectual property, and the newspaper cites Joseph Stiglitz who has “warned against using the treaty to ‘restrict access to knowledge’ (DePillis, website). This year, Stiglitz has written that “the TPP would make the introduction of generic drugs more difficult, and thus raise the price of medicines. In the poorest countries, this is not just about moving money into corporate coffers: thousands would die unnecessarily” (Stiglitz, website), and thus, he concludes a balance has to be carefully constructed between profit and public health. Another obstacle noted by the *Post* is the issue of state support for publically owned enterprises, and how such assistances effects their ability to play on a level scale on open markets. Still another is “market access,” already seen as a major problem between Japan and the United States. Still another is “Investor-state dispute resolution,” and, finally, questions of sale of tobacco, negotiations concerning which have recently “alarmed anti-smoking advocates who worry that tobacco companies will continue to sue nations for passing laws that heavily tax cigarettes or ban certain kinds of advertising” (DePillis, website).

Innumerable authors have expressed serious concerns over the secrecy of the negotiations, and Wikileaks has released the entire chapter on Intellectual Property. The lack of transparency in the negotiations has many extremely concerned, as there is insufficient information offered to the public to say nothing of the academy concerning the process and its progress, so that informed public discussion may ensue. To quote one source, the Electronic Frontier Foundation, “The entire process has shut out multi-stakeholder participation and is shrouded in secrecy” (“What’s Wrong with TPP,” 2012, website)

A final summary is, perhaps, offered by *The Guardian*, which lists the following as areas of deep concern: “Intellectual Property,” claiming that the U.S. is seeking very stringent rules concerning copyright and patent protection, and even seeks “to impose criminal penalties for ‘unintentional infringements on copyright.’” “Investment,” as “the US position on investor-state dispute settlement provision (ISDS) grants foreign companies the right to sue the government under international law.” “E-Commerce,” where the US “has reserved its position on privacy...[and]...has left people wondering whether the TPP will undermine privacy...” “Medicines and health,” most of the issues of which have been discussed above in this paper. “Environment”

because “the US and Australia [are] opposing any extension of the text on climate matters.” “Financial Regulation” because “[t]he US reportedly wants to restrict the ‘financial tools’ available to foreign governments to tackle potential financial crises.” “Labour Rights,” because only the US and its close ally, Australia, “have accepted the text on ‘dispute settlement on labour rights’” though apparently its provisions were not made public. “Tobacco Control” where the unknown text on “tobacco exception” has seen the agreement of only two nations besides the US. Finally, “Agriculture” where the US has not agreed to remove subsidies on goods headed to other nations, though all others in the agreement have (Chan, website).

## CONCLUSION

This paper seeks to introduce readers to the proposed Trans-Pacific Pact. It endeavors to explain the general nature of Free Trade Areas, utilizing the examples of several other FTAs, as well as differences with the World Trade Organization. Most importantly, it seeks to examine the process by which this extremely large, multi-continental proposal is being developed, its membership, its benefits, and finally, the obstacles to its achievement to date.

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# EMPLOYEE ASSISTANCE PROGRAMMES AS AN IMPORTANT SERVICE AT A COAL MINE IN SOUTH AFRICA

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## ABSTRACT

*It is important to acknowledge that employees need to be physically and mentally healthy in order to be productive, innovative, improve the management of technology and boosting the profitability of the organisation. Common problems that employees may experience are stress, burnout, work pressure, conflict and change management, and work-life balance; wellness not being sufficient, including substance abuse and HIV/AIDS; financial issues; and lack of legal assistance. These problems should be addressed by the intervention of Employee Assistance Programmes. The objective of the study was to determine if the demographic groups differ in terms of their experience of the services rendered as part of the Employee Assistance Programme. Employees of all categories participated in the study, namely; senior management, middle management, technical staff, administration staff, miners and the workforce. The population consisted of 301 with a response rate of 53%. A convenience sampling method was used. The results were presented and discussed according to the outcomes of the statistical analysis of demographic frequencies, Cronbach's alpha, ANOVA and correlation of subscales. The quantitative study substantially proved that the outsourced Employee Assistance Programmes are effective, but legal assistance and financial issues showed some inadequacies.*

**Keywords:** Employee Assistance Programmes (EAP), stress, burnout, work pressure, conflict and change management, work-life balance, wellness, financial issues, legal assistance

## INTRODUCTION

The study aims at determining the perceptions of employees concerning their usage of EAP, and not necessarily the productivity and other monetary gains as a result of the intervention thereof. However studies show that the intervention of EAP in organizations produced positive outcomes including cost-savings for organisations and evident change to employees who sought counseling under their auspices (Csiernik, 2011, p. 334). Leon (2012: 12) reaffirms by stating that the benefits of EAPs to companies come in the form of lower insurance premiums, increased productivity, reduced absenteeism, improved morale, and increased employee commitment and engagement. There are also claims that workplace counseling, which is part of EAP, alleviates psychological problems (McLeod, 2010, p. 238).

## LITERATURE REVIEW

EAP can be defined by using various components and dimensions that are addressed by these services in order to gain some in-depth knowledge thereof (Jacobson, 2010, p. 2)

## Definitions of Employee Assistance Programmes

Employee Assistance Programmes are designed to help employees deal with work and non-work stressful situations (Gibson, Donnelly, Ivancevich & Konopaske, 2012, p. 213).

Employee Assistance Programmes offer short-term counseling and long-term referrals for various behavioural health issues like depression and alcohol problems (Osilla *et al.*, 2010, p. 194). Employee Assistance Programmes offer counseling and advisory services such as personal legal and financial services, child and elder care referrals, adoption assistance, mental health counseling and life- event planning (Dessler, 2013, p. 469).

## Dimensions addressed by Employee Assistance Programmes

Scholars identified different types of services provided by EAP because the utilization of these services could not be narrowed to only one or few dimensions (Jacobson & Jones, 2010, p. 4). Prottas, Diamante and Sandy (2011, p. 297) mention that the evolutionary step of adding more EAP services is triggered by client demand and the growing complexity of workforce dynamics, for example workforce diversity, work-life balance, cross-cultural management and interpersonal challenges. These dimensions are briefly discussed below.

### *Stress*

Stress is experienced when the state of psychological equilibrium is perceived to be threatened (Varvogli & Darviri, 2011). Liu and Alloy (2010, p. 2) agree by adding that stressful life events significantly increase individual vulnerability to experiencing persistent feelings of sadness called depression. A systematic review on the impact of stress concluded that it does impact on performance (Arora *et al.*, 2011, p. 226).

### *Burnout*

If employees perceive their job responsibilities as being beyond their capabilities, they feel disillusioned and experience burnout. Burnout is a state of physical, emotional and mental exhaustion as a consequence of long-term interactions with people in emotionally demanding situations (Regis, 2008, p. 266). However Schaufeli and Salomona (2014, p. 296) state that research has shown that burnout is currently defined as a crisis on an employee's relationship with work in general rather than his/her relationship with people at work, as it was purported to be the case in the past.

### *Work pressure*

Work Pressure can be narrowed to job demands referring to aspects of a job that requires continuous physical and /or psychological effort associated with costs (Hakanen, Schaufelli & Ahola, 2008, p. 4737). It can also be aligned to work overload which refers to having a lot of work to do with inadequate resources (Boysen, Kiel & Scoll, 2010, p. 4737). The consequences of high job demand lead to strain and health impairment, whereas those of having sufficient resources lead to increased motivation and higher productivity (Schaufeli & Taris, 2014, p. 43).

### *Conflict management*

Conflict management is the ability of individuals or groups to link their unique or similar goals with those of others to ensure a harmonious and cooperative working relationship to achieve individual, group and organisational goals. (Zhang, Cao & Tjosvold, 2011, p. 1588). Furlich and Clapp (2013, p. 1) emphasize that conflict is unavoidable mostly in organisations where employees work in groups and projects that require continuous personal interactions. In order for conflict to be successfully managed, better understanding of it need to be sought.

### *Change management*

Studies uncovered that organisations in pursuit of managing change combine the constant honing of their existing capabilities and developing new ones to better fit in a constantly evolving environment (Dixon, 2013, p. 14). Resistance to change is inevitable and in such instances it is suggested that change should be properly communicated, known and understood by people so that they can buy into it (Goetsch & Davis, 2010, p. 196). However van den Heuwel, Demerouti, Bakker and Schaufeli (2013, p. 11) warn that the impact of organizational change can be demanding to an extent that it negatively affect employees' health and well-being.

### *Work-life balance*

Organisations should ensure that employees satisfy both their job responsibilities and their responsibilities at home, because the imbalance thereof may be detrimental to both the employees and the organisation. Rawlings, Omole and Festus (2012, p. 110) claim that the profitability of the organisation can be enhanced by addressing both the quality of the employee's personal and work lives. Downes and Koekemoer (2011, p. 2) are of the opinion that work-life policies improve the autonomy of workers in bringing together the work and non-work areas of their lives.

### *Wellness*

Wellness programmes are health and fitness programmes designed to keep employees healthy in order to increase productivity and decrease employer health costs (Robbins, DeCenzo & Coutler, 2011). Other components of wellness under discussion are substance abuse and HIV-AIDS.

Substance abuse is by implication the wrong and/or excessive use of drugs and alcohol, the symptoms of which are slurred speech, poor control, memory loss, poor judgement, and conflict with others. Furthermore discussions pertaining to substance abuse research revealed that EAP helped establish boundaries, workplace intervention efforts and cost containment issues (Doukas & Cullen, 2010:11).

### *HIV/AIDS*

It is important that employees be made aware of the facts regarding HIV/AIDS. Studies suggested that the most relevant strategy underlying the interventions of reducing the HIV/AIDS stigma was education through the provision of factual information about HIV/AIDS (Mahanjan *et al.*, 2008).

### *Financial issues*

Employee Assistance Programmes should provide financial management knowledge to employees because lacking the skills thereof may result to employees experiencing financial problems that can spill over to the quality of their work performance. According to Gorgievski, Bakker, Schaufeli, van der Veen and Giesen (2010, p. 514), there is abundant research evidence relating subjectively experienced financial problems to mental and physical well-being of the research subjects. However Struwig and Plaatjes (2007, p. 21) suggest that the current knowledge of employees need to be assessed in order to design the financial management courses accordingly.

### *Legal Assistance*

Employee Assistance Programmes need to help employees when they experience legal problems. Research conducted by Harris Interactive (2011, p. 1) indicates that the employees' need for legal services is rising since 70% of Americans have at least one new legal matter each year and half of the population does not have a will. Other studies have supported the significance of assisting employees with legal services, like in case of female employees who experience Intimate Partner Violence (IPV) (Pollak *et al.*, 2010, p. 190).

### *Efficiency of EAP*

It is important to get feedback about the efficiency of EAP from both the organisation and employees alike. Studies by Sieberman and Pienaar (2011, p. 12) show that some organisations indicated that EAPs were less



effective because their constructs are difficult to measure, unless each intervention is assessed separately after it has been utilised. The perspective of Benavides and David (2010, p. 296) reveal that it may take some time to realise the benefits of EAP, but it is an option to lower health care costs. DeFrank (2012) proposes that stress management courses be introduced whereby employees will learn coping techniques that they can practise and give feedback on their effectiveness.

## **RESEARCH DESIGN**

The research design comprised mainly of the following components:

### **Research problem**

Common problems that employees may experience are stress, burnout, work pressure, conflict and change management, and work-life balance; wellness not being sufficient, including substance abuse and HIV/AIDS; financial issues; and lack of legal assistance. These problems should be addressed by the intervention of employee assistance programmes. Scholars claim that the focus of recent EAP services is typically “broad brush” in addressing a wide range of personal concerns and these services are often integrated with work life, behavioural health, wellness, or other programmes (Merrick & Hodgkin, 2011, p. 86).

### **Research aim**

The objective of the study was to determine if the demographic groups differ with regard to their experience of an EAP.

### **Research questions**

The research questions were as follows:

- Do the demographic groups differ in terms of their experiences of the services rendered as part of the employee assistance programme (EAP)?
- Are there relationships between the subscales namely, wellness, substance abuse, HIV/AIDS, financial issues, legal assistance, stress and work-life balance?

### **Research method**

A quantitative research method was used whereby numerical rather than categorical responses from participants were relied on (Yin, 2014:19).

### **Research participants**

A convenience sampling method was used indicating that the researcher picked and chose participants who were easily and readily accessible (Bryman, 2001, p. 97). The population consisted of 301 participants with a response rate of 53%. The demographic composition of the respondents will now be described. Administrative staff comprised 8.8% of participants and 1.9% were technical staff. Top/senior management comprised 1.9%, which was the lowest. Seventeen per cent were from middle management and miners comprised 12.6%. The workforce constituted 34%, which was the largest group. Most respondents were between the ages of 40 and 49 (40.0%), followed by 21.4% aged 30 to 39, 19.3 aged between 18 and 29, and lastly 7% were 60 years and above. Respondents who did not specify their age categories comprised 8.8% of the participants. Females comprised 15.9% of the respondents and male respondents, 84.1%, which was an overwhelming majority. A total of 36.0% of participants fell in the category of 1 to 5 years of service. A response of 15.1% came from the category of 6 to 9 years of service. The categories 10 to 19 and 20 to 30 succumbed 23% each.

## Measuring instruments

In order to measure the perceptions of participants regarding the EAP, 301 questionnaires and letters of consent were delivered to employees. Within a period of three months, the researcher received 159 completed questionnaires from employees who participated. The response rate was 53%. The questionnaire comprised a 5-point Likert scale (where 1 = strongly agree, 2 = agree, 3 = disagree, 4 = strongly disagree and 5 = I don't know). Close-ended questions were used and respondents had to choose answers from the scale which best described their perceptions of the EAP.

The Cronbach's alpha was performed in order to assess the internal consistency of the measuring instrument to determine reliability, for example the degree to which the respondents agreed or disagreed with the statement of the questionnaire concerning a particular dimension (Msweli, 2011). Anastasi and Urbina (1997) state that the Cronbach's alpha should be above 0.7 as an indication of internal reliability of the measuring instrument. Content validity was used to ensure that the measuring instrument was in line with the literature on the topic because if other indicators are overlooked, the study will lack validity (Singh, 2007).

## Statistical analysis

Once the questionnaires were collected, the responses were captured into the Statistical Package for Social Sciences (SPSS). Malindi (2010) states that Bartlett's test of sphericity determines the strength of the relationship amongst variables. The analysis of variance (ANOVA) was used to measure the experiences of respondents with regard to the services rendered as part of the EAP. A correlation analysis was also used to determine the relationship between the subscales.

## Ethical considerations

Ethics clearance for the study and the questionnaire were received from the Tshwane University of Technology's Research Ethics Committee. Confidentiality and anonymity were ensured by the researchers by not revealing the identity of the respondents.

# RESULTS

**Table 1: Cronbach's alpha**

The results will be presented and discussed according to the outcomes of the statistical analysis of the

Sub scales	Number of items	Alpha	Average inter-item correlations
Financial issues	5	0.918	0.690
Legal assistance	4	0.918	0.728
Efficiency	6	0.550	0.190
Wellness (including substance abuse and HIV/AIDS)	5	0.891	0.621
Work-life balance, stress, burnout, conflict and change management	9	0.940	0.635

Cronbach's alpha, ANOVA and correlation analysis.

Almost all the subscales proved to have adequate internal consistency, meaning that respondents agreed that EAP addressed these dimensions satisfactorily, indicating a positive perception about EAP. It is only the perception of efficiency that showed insufficient internal consistency by scoring below the threshold of 0.7.

**Table 2: ANOVA**

Demographic variable	Differences with regard to	F ; p	Post hoc analysis
Age	Financial	3.422 ; 0.020	Not significant

Gender	Legal	5.041 0.027	; Males more positive than females
Occupation	None		
Years of service	None		

The results proved the dimension of legal assistance to have marginal differences between the perceptions on gender where males were more positive than females. Management should be therefore sensitive to deal with this matter effectively. The different age groups showed a slight difference in their perception of financial issues. Even though not significant, this dimension needs some attention. The demographic groups of occupation and years of service did not show any difference in perception, indicating an underlying positive perception of the EAP. In light of the above results outcomes, the first study objective, namely to determine whether there were differences in perception amongst demographic groups, was therefore addressed.

The correlation of the subscales was conducted to determine the strength of the relationship between the responses to a particular dimension compared to other dimensions. Willemse (2009) explains that a linear correlation coefficient is a numerical measure to describe the degree of the strength and direction by which one variable is related to another.

**Table 3: Correlation of the subscales**

Subscales		Wellness, substance abuse and HIV/AIDS	Financial issues	Legal assistance	Stress, work–life balance
Wellness, substance abuse and HIV/AIDS	Pearson's correlation	1.0	0.737**	0.700**	0.824**
	Sig. (2-tailed)		0.000	0.000	0.000
	N	130	115	111	129
Financial issues	Pearson's correlation	0.737**	1.0	0.802**	0.740**
	Sig. (2-tailed)	0.000		0.000	0.000
	N	115	121	109	118
Legal assistance	Pearson's correlation	0.700**	0.802**	1.0	0.780**
	Sig. (2-tailed)	0.000	0.000		0.000
	N	111	109	118	114
Stress, work–life balance	Pearson's correlation	0.824**	0.740**	0.780**	1.0
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	129	118	114	134
**, Correlation is significant at the 0.01 level (2-tailed).					

It is clear from the table that there is a strong relationship between financial issues and legal assistance and even other dimensions, all scoring above 0.7, indicating an acceptable and similar pattern of responding in agreement to the statements of the questionnaire for all dimensions. The results again reflected a positive perception of the EAP. Therefore, the objective, namely to determine if there are relationships between subscales, was also addressed. Note that the dimension of efficiency did not form part of the dimensions to be addressed by EAP in the original study inquiry, which is why it did not appear neither under ANOVA nor correlation of subscales. It was only covered under Cronbach's alpha as there were questions pertaining to it in the questionnaire because it was later deemed necessary to extend the focus beyond employees by including the quality of the work of EAP professionals.

## DISCUSSION

The quantitative study substantially proved that the EAP are effective, but legal assistance and financial issues showed some inadequacies. Legal as well as financial assistance are two challenging facets in the coal mining environment.

Assistance from the EAP service providers should therefore be emphasized in order to address the needs of the employees properly. The dimension of efficiency of EAP (in general) showed inadequate internal consistency since it scored below the threshold of 0.7, stipulated by the Cronbach's Alpha reliability test (Anastasi & Urbina, 1997). This dimension indicated a negative perception of respondents about the quality of the work EAP professionals. However studies suggested that courses on stress management be introduced which include the techniques that employees should practice and give feedback on their effectiveness (DeFrank, 2012). By so doing, employees would be in a position to know whether EAP are effective or not. Management can thus be informed on areas of the delivery of these programmes that need attention and improvement, as also suggested by studies conducted by Sieberman and Pienaar (2011).

The demographic groups differ in terms of their experiences of the services rendered as part of the EAP. The results uncovered that there was a small difference in perceptions in the category of age pertaining to financial issues. However studies only recommended the assessment of employee's recent knowledge about managing their finances, irrespective of their age groups (Struwig & Plaatjes, 2007). On the other hand male participants proved to be more positive than females in their perceptions regarding the dimension of legal assistance. This finding contradicts studies conducted by Pollak et al. (2010), which support the importance of assisting female employees with legal services, for example in cases where they experience Intimate Partner Violence (IPV).

The correlation of subscales showed an underlying agreement with the statements of the questionnaire, reflecting a general positive perception regarding the EAP. This is also an indication that employees agree that they are having similar experiences and results of using EAP for every dimension that is addressed.

The EAP is an important service at the coal mine under study because its intervention in solving employee problems contributes to employees who are productive, innovative and are able to improve the management of technology and boosting the profitability of the organisation. However the contribution of this study to the body of knowledge is that priority should be focused on improving the dimensions of efficiency of EAP in handling employee physical and psychological health problems, followed by legal assistance and financial issues.

## **LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH**

The limitations were that firstly the study could not reach other divisions of the company and other mining companies in the area and sector that is not in the public domain compared to the gold and mostly the platinum sectors in South Africa. Secondly the non-users of EAP were included as participants which resulted to obtaining overwhelming responses to the "I don't know option". Lastly it was the non-inclusion of the dimension of efficiency as being part of the initial study investigation.

It is recommended that for future research the study should cover the mining industry nationally. The accrued improved productivity and cost-benefit analysis of EAP should also be researched. The influence of employee wellness on absenteeism rates, productivity, performance, motivation and staff retention can also be investigated in the context of the coal mining industry. Work-life balance issues and employee engagement could also be investigated in the coal mining industry. This will contribute to the wellness and retention of employees.

### **Management and policy implications**

Before managers can meet expectations for fully supporting wellness initiatives, they need knowledge, tools, and resources. They also need time to learn about the program, communicate it to staff, and implement any changes

required to bring their departments on board. Health promoters must not assume that managers are knowledgeable and confident about health promotion. Special training sessions and clear, concise materials easy access to staff resources are ways to bring managers up to speed. Trial participations can give managers first-hand experience with wellness services—along with visibility.

Managers exert a powerful influence over employee morale, workloads, team communication norms, and job satisfaction. Because of their positions, they can serve as motivators and role models to promote healthy behaviors and participation — resulting in decreased healthcare and turnover costs as well as increased productivity. As company leaders, managers must give health promotion the high priority of other key strategies — the language used to describe it and policies to support it should parallel customer service, recruiting/retention, and quality.

Management should join forces with EAP service providers and employee representatives in assisting with employee referrals and awareness campaigns of EAP. EAP policies should be formulated to refer and channel troubled employees. Management should also pay serious attention to each and every dimension addressed by EAP and be on the lookout for the emergence of new dimensions as a result of unfamiliar problems brought by employees and the ever-changing work environment. Through the support given by the company, employees will be able to maintain a healthy way of life.

## CONCLUSION

It is important to acknowledge that employees need to be physically and mentally healthy in order to be productive, innovative, improve the management of technology and boosting the profitability of the coal mine under study. The work and non-work problems experienced by employees may hinder the realization of the above-mentioned goals. In this regard EAP may prove to be an appropriate intervention in case employee problems are experienced. It is therefore imperative that EAP addresses the dimensions that encompass employee problems in a holistic manner as the study has uncovered that the dimensions of financial issues and legal assistance were not given enough attention. However the results of the study indicated that there was an underlying positive perception of EAP by the respondents. Improved productivity and employee performance can normally be other expected outcomes of the usage of EAP, but were unfortunately not the focus of the study and hence recommended for future studies.

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# **PERCEIVED ORGANIZATIONAL SUPPORT, INTERNAL MARKETING AND ORGANIZATIONAL COMMITMENT: A CORRELATIONAL STUDY AMONG UNIVERSITY PROFESSORS**

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## **ABSTRACT**

*The study examines the impact on 126 university professors of perceived organizational support and internal marketing on their organizational commitment. Exploratory and confirmatory factor analyses enabled adaptation of the data, to assess these associations. The results show that organizational support is more closely linked to the components of commitment than internal market. Managerial support and rewards both had a positive correlation with the affective and normative components of commitment, while the continuance component showed a negative correlation with freedom at work. Of the marketing aspects, only development presented a positive relationship with normative commitment.*

**Keywords** Services Marketing, Internal Marketing, Organizational Support, Organizational Commitment, Higher Education Institutions.

## **INTRODUCTION**

In the current knowledge society the human factor has special relevance for business and is up to managers form teams with committed people with capability to perceive and pursue opportunities. Increasingly, human capital is considered an essential resource and in Higher Education Institutions (HEI's) whose basic ingredient is intelligence, persons are the raw material and the instrument of intellectual production. HEI's are undergoing changes that require better results and lower administrative and operating costs. This requires that persons be encouraged to carry out their activities with satisfaction, developing the spirit of creativity and team, respecting the autonomy and individuality to develop a work of excellence. Employees need to be motivated and committed. Given these scores, it becomes of interest to know how HEI's are promoting in the teachers the organizational commitment. In this study we analyzed how the influence in organizational factors and internal marketing is. So, it is considered the five stable factors recognized by Hornsby, Kuratko and Zahra (2002) in organizations that encourage the corporate entrepreneurial behavior: management support, freedom at work, rewards, time available and uncertainties at work. Related to the aspects of internal marketing, according to the model employed by Bohnenberger (2005) in Brazil, and are completed: development, admission and responsibilities, adequacy to the functions, internal communication and external communication. The aim is to assess the effects of management actions and marketing in the employee perception and how this relates with the affective components, instrumental and normative of commitment, according to the model of Meyer and Allen (1991).



In recent years, various studies have used Meyer and Allen's (1991) multidimensional model of organizational commitment, which was validated in Brazil by Medeiros and Enders (1998). Meyer and Allen's model has three components: affective, normative and continuance, as well as with some variants, have been applied to teachers working in Brazilian HEIs in several studies postgraduate course conclusion works, including those of Brandão (1991), Vital (2002), Sanches (2004), Amaral (2008), Chaves (2011), Giacomassa (2013) and Lizote (2013).

These processes, in the field of the study of organizational commitment, involve changes in technology, global competition and consumer demand that pressure companies to improve efficiency (Meyer, 2009). To understand the commitment with the job requires a different act in the field of human resources, that means one should act strategically, and not only operational (Marras, 2000). In the case of HIE's, recognized as one of the main vectors of socio-economic and cultural development of the countries, the teachers are players and inducers of changes that promote social progress. From this standpoint, we need to analyze how the internal organizational factors relate with Intrapreneurial behavior and with the commitment of the university teachers, two personal behaviors that are linked to performance and therefore to the quality of graduates. Regarding the association between organizational factors and commitment has been highlighted the importance of persons management systems as a natural way to utilize human resource practices in favor of the commitment (Morrow & McElroy, 2001), although them must be used judiciously. And the employee commitment, understanding as internal customers, is fundamental to the implementation of plans that will lead the organization to satisfy customer expectations.

## METHODS

The first category gathered data on organizational factors, according to the model of Moriano *et al.* (2009). By means of five statements, five variables were recorded, namely: managerial support (AD), freedom at work (LT), rewards (RC), available time (TD), and uncertainty in tasks (IT). The next block contained eighteen items relating to the teachers' organizational commitment, measuring their affective (CA), continuance (IC) and normative (CN) components based on six items for each one. It was drawn up based on model of Meyer and Allen (1991), validated for Brazil by Medeiros and Enders (1998) and recently applied to university teachers in the studies of Giacomassa (2013) and Lizote (2013). The third block gathered data on the teachers' perceptions concerning some aspects of internal marketing that is developed at their institution. To record these perceptions, twenty-one items, suggested by Bohnenberger (2005), were adapted to the university environment. These items were distributed as follows: four in the category development (D), another four relating to admission and responsibilities of contracted parties (AR), four more to determine adequacy to their functions (AF), six to measure internal communication (CIn) and three to measure external communication (EC). A five-point Likert-type scale was used in the three blocks, with 1 representing "Strongly Disagree" and 5 "totally agree". The questionnaire also included a statement that summarizes the general perception of the interviewees about how they think they are seen within the institution (PG). The alternative responses were: (i) an inversion in the medium and long term; (ii) a cost to decrease; (iii) a customer of the university; (iv) a human being; and, v) a resource that is difficult to administer. This categorical variable allowed the database to be selected, and analyses to be carried out according to this aspect, which the work of Bohnenberger (2005) calls "Philosophy of Management".

All the completed questionnaires were organized in an Excel® electronic spreadsheet, with pre-processing of the data (Hair Jr. et al., 2009). We identified fifteen items of missing data, eleven in the block of organizational factors and four in commitment. One teacher failed to respond to two items, while the other missing data were from just one teacher. As thus quantity is very small in relation to the permitted maximum, and as the missing data was not associated with a pattern, it was decided to fill in the empty cells with the mean values for the corresponding indicators. Outliers were assessed through the Box Plots graphics function of the Statistica software®, using a coefficient of 1.5 deviations. One hundred and sixty-two (162) outliers were detected, representing approximately 1.5% of the data collected. After checking that they were distributed among the various respondents and items, it was decided to keep them in the database. No typing errors were found. In order to evaluate the normality of distribution of the variables, considering that the data came from Likert scales, calculations of asymmetry and kurtosis performed (Hair, Jr. et al., 2009). Finney and DiStefano (2006) affirm that data with coefficients of up to 2 for asymmetry and up to 7 for kurtosis, in module, can be considered

almost normal. It was confirmed that no value exceeded those limits and, as a result of the procedures described, all 126 questionnaires and 65 variables were kept in the final database.

The statistical methods used were exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), Analysis of variance (ANOVA) and analysis of correlations. For each method, the premises of their use were evaluated (Hair Jr. et al., 2009). Before performing the factorial analyses, Cronbach's alpha coefficient was calculated for each dimension or component of the construct considered, and the correlation of the item with the total, according to the procedure suggested by Churchill Jr. (1979). Subsequently, the test of Kaiser, Olkin and Meyer was used, and that of Bartlett to confirm the feasibility of using factorial analysis. In the EFA, extraction of the principal components was used, which requires no multi-normality, the factors being extracted according to the criterion of Kaiser, based on matrices of correlations. Other restrictions used were factor loadings had to be equal to or higher than 0.70 in module and the commonality equal to or higher than 0.5. The variance extracted by the factor in the case of single-dimensionality had to be equal or greater than 50%. In the CFA, a criterion of coefficient between the indicators and the dimension or construct considered equal to or greater than 0.5 was used. Based on the factors formed with the indicators that met the minimums stipulated to be retained, factorial scores were generated for the respondents, which were used in subsequent processes. The ANOVAs performed were always univariate and, therefore always very robust forward violations of normality and homoscedasticity (Harris, 1975), which is generally the case when using Likert scales.

## RESULTS

With each dimension of the organizational factors, item-total correlation was done, and the reliability was calculated with Cronbach's alpha, as suggested by Churchill Jr. (1979). The results indicated that the factor time available (TD) was the only one with item-total correlation values lower than 0.4. This occurred with three of the five indicators. In addition, the Cronbach's alpha calculated for this dimension was also far below the recommended value of 0.7, reaching only 0.3539. As a result, it was decided to exclude this organizational factor from the subsequent analyses. The exploratory factorial analyses performed individually with each one of the dimensions, and in accordance with the restrictions described in the methodological procedures, resulted in the exclusion of some items. Next, a confirmatory factor analysis was carried out, which helped define the final items for each dimension. Finally, a new factorial analysis was performed for the construct with all the selected indicators. Using the criterion of Kaiser, four factors were extracted which, after normalized varimax rotation, resulted in the association of each factor with one of the dimensions, as shown in Table 1.

Based on this configuration, the factorial scores were generated by associating each him with the corresponding dimension. The first factor with the uncertainty in tasks, the second with freedom at work, the third with managerial support, and the fourth with rewards. The data for commitment were then analyzed in the same way, resulting in the figures shown in Table 2.

In the same way as for the organizational factors, with the results obtained for the components of commitment, the factorial scores of the respondents were generated. The first factor relative to the affective component, the second to the continuance, and the third to the normative. Next, the data on internal marketing were analyzed, using the same procedures. The difference with the previous results is that the five aspects considered do not constitute dimensions that reflect a single construct; therefore it was decided to analyze them independently. The items considered for each aspect are shown in Table 3.

For each of these aspects, the factorial scores were generated for the teachers who took part in the research and together with those related to the organizational factors and to commitment, a new database was created. The item corresponding to the general perception (PG) that the teacher believes the institution has of him or her was also included in it. Based on this new data matrix, the correlations of the organizational factors and aspects of the internal marketing with the components of commitment were also calculated. The results showed that in the case of marketing, only internal development had a significant and positive correlation with the normative component of commitment. The analysis of correlations of the organizational factors show that the affective component has a significant and positive association with managerial support, rewards and uncertainty at work, the normative component with managerial support and rewards, and the continuance component with freedom in the workplace, but with a negative correlation.

**Table 1 - Organizational Factors.** Factors extracted by principal components and normalized varimax rotation. Values of less than 0.3 (\*).

	Factor 1	Factor 2	Factor 3	Factor 4
AD1	*	*	0.754010	*
AD3	*	*	0.853132	*
AD4	*	*	0.729004	*
AD5	*	*	0.761943	*
LT3	*	0.779011	*	*
LT4	*	0.855836	*	*
LT5	*	0.881695	*	*
RC2	*	*	*	0.823928
RC3	*	*	*	0.877890
RC4	*	*	*	0.852542
RC5	*	*	*	0.797252
IT1	0.753610	*	*	*
IT3	0.703340	*	*	*
IT4	0.833333	*	*	*
IT5	0.701881	*	*	*
Expl.Var	2.601792	2.281317	2.755182	3.221841
Prp.Totl	0.173453	0.152088	0.183679	0.214789

Source: Research data.

**Table 2 - Organizational Commitment.** Factors extracted by principal components and normalized varimax rotation. Values of less than 0.3 (\*).

	Factor 1	Factor 2	Factor 3
CA1	0.711672	*	*
CA2	0.816782	*	*
CA3	0.801680	*	*
CA4	0.926919	*	*
CA5	0.936561	*	*
CA6	0.856488	*	*
CI2	*	-0.736994	*
CI3	*	-0.834207	*
CI4	*	-0.834200	*
CI5	*	-0.733563	*
CI6	*	-0.814014	*
CN2	*	*	0.869003
CN3	*	*	0.867556
CN5	*	*	0.804236
CN6	*	*	0.730783
Expl.Var	4.714366	3.195863	2.994321
Prp.Totl	0.314291	0.213058	0.199621

Source: Research data.

**Table 3 - Aspects of internal marketing.** D: development; AR: admission and Responsibilities; AF: suitability to functions; CIn: internal communication; and, CE: external communication.

Factor 1		Factor 1		Factor 1		Factor 1		Factor 1	
D2	0.715770	AR1	0.757711	AF1	0.811335	CIn3	0.807480	CE1	0.717963
D3	0.728464	AR2	0.820601	AF2	0.748206	CIn4	0.822064	CE2	0.845139
D4	0.733964	AR3	0.756803	AF4	0.804928	CIn5	0.893405	CE3	0.882785
Expl.Var	1.581690	Expl.Var	1.820263	Expl.Var	1.865986	Expl.Var	2.125986	Expl.Var	2.009040
Prp.Totl	0.527230	Prp.Totl	0.606754	Prp.Totl	0.621995	Prp.Totl	0.708662	Prp.Totl	0.669680

Source: Research data.

Considering that this result with the total set of teachers can be derived from the heterogeneity of the respondents, the answer was sought using the categorical variable PG (general perception). Using this as a predictor of ANOVA, it was demonstrated that for the various aspects of internal marketing only, the simultaneous comparisons showed significance. When paired comparisons were carried out using the Tukey test for an unequal number of repetitions, it was found that the groups identified as "a cost to decrease" and "a resource that is difficult to administer" generally had lower average values than the other groups. Thus, the correlations between organizational factors and internal marketing were compared with the components of commitment for each of the groups derived from this variable.

For the first group, when the teachers thought they were seen by the institution as "inversion in the medium or long term" there is only a significant and negative correlation between the affective component of commitment and uncertainty at work, i.e. when the organizational limitations decreased, affective commitment decreased, and vice-versa. With the aspects investigated from internal marketing, on the other hand, significant and positive correlations were found between the affective component and communication, both internal and external. There was also a significant association between external communication and the normative component. The second group, "a cost to decrease", shows that affective commitment is positively correlated with uncertainty in tasks of organizational factors, but with none of the aspects of internal marketing. The third group, those who believe they are seen as a "customer of the university", showed a significant and positive relationship between the normative component of commitment and rewards, but for all aspects of marketing, the correlations of admission and responsibilities (AR) occur with the affective (CA) and normative (CN) components. CA, in turn, was correlated with AF "adaptation to the functions" and CN with CIn "internal communication". The fourth and largest group that represents those who think they are seen as "human beings" in the institution, a group with fifty-eight members, showed significant positive correlations for affective commitment with managerial support and rewards. It also showed significant, but negative correlations between the continuance component and rewards and freedom at work, indicating that the continuance component decreases as freedom and rewards increase. For internal marketing, only the normative component had positive and significant correlations with development, admission and responsibility, and with suitability for functions. Finally, the fifth group, comprising those who think that the institution considers them as "a resource that is difficult to administer", had no significant correlations with the aspects of internal marketing. However, with the organizational factors, it is confirmed that there are significant positive correlations for the affective component of commitment and the factors managerial support, rewards, and uncertainty at work, the latter two factors also being associated positively and significantly with the normative component.

## CONCLUSION

Because the database is heterogeneous, as it includes teachers of public, private community and private profit-making universities, with different labor contracts, it would not be not appropriate to analyze the associations of organizational factors with commitment as though it were the responsibility of human resources management alone but rather, as a representative set of actions is carried out by the upper management. The five aspects listed; managerial support, freedom at work, rewards, available time and uncertainties at work, were recognized by the respondents as actions that are developed by their institutions. However, it was necessary to exclude the dimension "time available" due to a lack of correlation between the indicators used to measure this dimension. The other four aspects together form the construct denominated organizational factors which, rotating the result of factorial analysis, leads to a relative independence between the dimensions and enables the use of factorial scores to calculate correlations with the components of commitment.

The relationships found with significance among the organizational factors and the three components of commitment were consistent with those recorded in other studies. Thus, managerial support had a positive and significant correlation with the affective component of commitment, as verified in the meta-analysis of Rhoades and Eisenberger (2002), which describes a strong positive relationship between affective commitment and organizational support perceived by the employee. This same association has been reported for workers in various cultures, including Korea (Lee & Peccei, 2006), China (Liu, 2009) and India (Gokul, Sridevi & Srinivasan, 2012). Regarding the association between the affective component and rewards, the result also corroborates the findings of other studies, such as those of Burke (2002), Kuvaas (2006) and Malhotra, Budhwar and Prowse (2007), who report the existence of significant positive relationships. For the dimension of uncertainty at work, which represents the organizational limitations perceived by the employee, no previous results were found, and the positive link that exists with affective commitment was unexpected, based on the theoretical construct. The relationship of the normative component with managerial support was the same as for the affective component, i.e. significant and positive. This result has been reported in several studies, such as those of Battistelli, Mariani and Bello (2006) and those of Aube, Rousseau and Morin (2007), among others. This relationship can be explained based on the rules of reciprocity. Thus, an employee who receives support or favorable attitudes feels obliged to reciprocate what he or she has received. Rewards, in turn, also had a positive and significant association with the normative component of commitment, as reported in a study by Malhotra *et al.*, (2007) relating to intrinsic rewards. Finally, instrument or calculative commitment showed a negative and significant correlation with freedom at work, which shows that the more the teacher feels they have freedom to carry out their work, the more the calculative component decreases. This is in line with the understanding inherent to this kind of commitment, which relates to the psychological state of need, of having to stay in the organization.

Considering the aspects of internal marketing that were analyzed individually, it is seen that only normative component had a positive and significant association with development. This result is consistent, in part, with the study of Meyer, Irving and Allen (1998), as their findings on the actions that include the development show a positive relationship with the normative component and also with the affective component. It still has a negative correlation with the continuance component. However, these results obtained with the complete database change noticeably when the analyses are carried out based on the groups that are distinguished by the so-called general perception question. It identifies the teachers by the idea of how they imagine being considered by the organization.

In the analyses by groups, in three of them, distinct aspects of internal marketing showed a correlation with commitment. However, in no case did this occur for the continuance component. Internal communication presents a positive association with the affective component, in the first group, and the normative component, in the first and third groups, corroborating the study of Bohnenberger (2001), which also found a weak but positive relationship with the continuance component. Admission and responsibility (AR) and suitability for functions (AF), in turn, showed a correlation with the affective and normative components in the third and fourth groups. This relationship was also verified by Bohnenberger (2005), however in that study, these aspects were considered together as human resources practices. Finally, the development showed a correlation with the normative component of commitment for the fourth group, and since it was the largest, it had the biggest influence. Various limitations of this study should be taken into account. Firstly, it should be noted that the sample is based on a specific country, Brazil, and a particular system of higher education. This could influence some of the relations found, due to cultural differences and differences in educational systems in different countries. Secondly, in this study we investigated only one type of higher education institution - universities; therefore there may be limitations when extrapolating these results to other types of institutions. Thirdly, the organizational factors and marketing aspects chosen might not have the same significance in public and private universities.

Further studies may clarify the relationships between the constructs considered. Many of the investigations that deal with them have been conducted in other types of organizations and, therefore the results obtained in an educational context may be useful in future comparative studies. Another suggestion for future study is to examine these relationships, taking into consideration the legal nature of HEIs.

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# **CHANGE-FIT MENTAL MODELS FOR MANAGERS HAVING TO PIONEER BUSINESS IN AN INTERCONNECTED COMPLEX ENVIRONMENT**

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## **ABSTRACT**

*The purpose of this paper is to present the potential form and function of a mental model of a successful change leader having to pioneer business in an interconnected and complex environment. An extant literature review revealed a gap in the knowledge about complexity and mental models and provided little guidance on research methodology in this context. The units of analysis in this study are individual mental models of individual change leaders, rather than shared mental models. Seven leaders were interviewed to gather thick descriptions, which were then analysed using Atlas Ti. A conceptual framework was developed by applying an interpretive constructivist paradigm using a qualitative research approach. This framework describes and maps the actual sense-making process a manager would display, as informed by a 'change-fit' mental model.*

**Keywords:** Change leaders, Mental model, Interconnectivity, Complexity, Sense-making

## **INTRODUCTION**

Rapid social, economic and technological changes are inevitable in the current century. This results in multiple voices crying for attention and change leadership effectiveness across all industries which clearly becomes a pressing matter. Managers more specifically are facing and experiencing greater complexity, resulting in increasing dynamics of instability and recurrence of crisis. Having to implement organizational change in such an existing complexity exacerbates the situation and inevitably leads to crisis that if it is not managed properly and interconnected, can be uncontrollable.

Dealing with complexity calls for a change in the role that a manager fulfils; from a manager to being a change leader having to interconnect the parts and ensure sustainable change. Literature assert that the process of sense-making and navigating through multiple variables in a complex crisis environment is determined by a manager's mental model and as a consequence, convincingly argue that the mental model of a manager is the source which will determine change leadership effectiveness in a complex crisis environment. A direct correlation between successful organisational change and a change-fit mental model of a manager has been established. Studies show that organisational decline is a result of complexities that go unnoticed or misinterpreted, by the leader's mental model and, as a consequence, are addressed through inappropriate actions with disastrous results (Chaize, 2000; Conner, 1998; Deardorff and Williams, 2006; Denton and Vloeberghs, 2003; Guillory, 2007; Karp, 2006; Kilmann, 2001; Pellissier, 2001; Quigley, 2001; Shelton and Darling, 2001; Wheatley, 2006; Youngblood, 1997; Zohar, 1998).

Therefore, literature appeals to managers to cultivate mental models that are change-fit for a complex environment. Such cultivation will imply a continuous shift and reframing of the mental model content through a



process of continuous learning. The change in mental models will enable managers to **see** the interconnectedness within the change situation, consciously **think** about their thinking which informs strategy formulation and **behave** with the intention that facilitates sustainable organisational transformation through the crisis.

Currently there is little agreement amongst scholars as to a common definition for mental models in the context of leadership and existing definitions are varied and vague. Secondly, existing research mostly focus on understanding mental models within a computer-processed context from a positivist paradigm which is methodologically and context-specific inappropriate for the complex crisis environment of managers and organisational change. Thirdly, conceptual frameworks on mental models only address what the process of shifting and learning in the mental model consists of, and not how the actual shift and learning-unlearning-relearning occur within the mental model (Deardorff and Williams, 2006; Pellisier, 2001).

The existing body of knowledge are mostly on understanding mental models by utilising quantitative methodology from a positivist perspective. This presents a limitation on the understanding of mental models and necessitates a study of mental models within a complex environment, because the context is not linear but rather multiple variables layered with complexity, calling for qualitative research.

This paper situates the processes presented within the context of the complexities faced by South African leaders. The need to operate and be effective in a multiple complex environment leaves South African leaders with a daunting question: **What** will determine change leadership effectiveness and **how** can they effectively ensure interconnectivity and lead transformation in this multiple complex environment? The research questions being addressed in this paper are:

- What is the form and function of a mental model?
- How are mental models influencing change leadership effectiveness within multiple complex organisational environments?
- How do successful change leaders use their mental models?

Therefore the purpose of this paper is to present the potential form and function of a mental model of a successful change leader having to pioneer business in an interconnected and complex environment.

## LITERATURE REVIEW

Scharmer (2009) postulates that leaders face three types of complexity, namely dynamic complexity, emerging complexity and social complexity. His argument is highly apposite for the South African situation. *Dynamic complexity* refers to the fact that there is a systemic distance between cause and effect. For example, the uncontrolled HIV pandemic, a poor education system and a lack of skills represent multiple causes which in South Africa require an intense focus in organisations on attracting and retaining talent. *Emerging complexity* is characterised by change where the solution to a problem is unknown, or even where the problem statement itself keeps shifting and unfolding in new ways. For example, the situation on the ground can change rapidly where there is mistrust between employees, unions and managers due to affirmative action, adverse labour relations and the gap between wealth and poverty, between the “haves” and the “have nots” (Denton and Vloeberghs, 2003). *Social complexity*, which refers to the product of the co-existence of multiple perspectives and divergent interests of different stakeholders, is perhaps most visible in South Africa. For example, aggressive union partisanship due to an increase in the disparity between the “haves” and the “have nots” emerged in the wake of the complicated and inconsistent implementation of the latest labour legislation. The managing and leading towards interconnectivity is especially important in these complexities mentioned.

The need to operate and be effective in such a multiple complex environment leaves South African leaders with a daunting question. **What** will determine change leadership effectiveness and **how** can they effectively ensure interconnectivity and lead transformation in this multiple complex environment? There is only one certainty: given the existence of multiple complexities, leaders can rarely rely on past experiences and solutions (Denton and Vloeberghs, 2008).

This leaves us with more questions: Why are some organisations successful while other organisations decline in the 21<sup>st</sup> century’s turbulent and unpredictable environment? In an attempt to answer this dilemma, current literature no longer focuses on the question “why change?”, and instead explores “how to change”

(Chaize, 2000; Conner, 1998; Deardorff and Williams, 2006; Denton and Vloeberghs, 2003; Guillory, 2007; Karp, 2006; Kilmann, 2001; Pellissier, 2001; Shelton and Darling, 2001; Wheatley, 2006; Zohar, 1998).

Kilmann (2001) argues that understanding and navigating a complex environment is not only difficult for leaders who have been “contaminated” (p.78) with the traditional approaches to leadership, but also foreign to them. Following on from this argument, a link has been established between successful organisational change and the self-transformational ability of a leader (Deardorff and Williams, 2006; Denton and Vloeberghs, 2003; Guillory, 2007; Karp, 2006; Serfontein, 2006; Shelton and Darling, 2001). Richie-Dunham and Puente (2008) assert that the process of sense-making and navigating through multiple variables in a complex context is influenced by a leader’s mental model. In a similar vein, Chaize (2000), Kilmann (2001) and Scharmer (2009) argue convincingly that the mental models of a leader determine change leadership effectiveness in a complex context. Therefore, the literature appeals to leaders to cultivate mental models that are aligned to a complex environment. Doing so requires continuous shifts and a reframing of a leader’s mental model content through a process of continuous learning (Guillory, 2007; Pascarella, 1998; Quigley, 2001, Youngblood, 1997). An organisation where leaders demonstrate the capacity to learn and adapt their mental models continuously as new patterns emerge is a quantum organisation that is in the process of being co-created by these leaders (Shelton *et al.*, 2002) and where rapid and continuous change occurs (Druhl *et al.*, 2001; Guillory, 2007; Shelton and Darling, 2003).

Because the existing definitions fail to reflect the richness and complexity of the mental model construct fully, the literature review suggested that future research should explore the nature and structure of mental models (Shelton and Darling, 2003; Theron and Roodt, 2000).

## **Theoretical Orientation: Complexity Theory**

Dent (1999) offers a definition of complexity which states that “complexity science is an approach to research, and a perspective that makes the philosophical assumptions of the emerging worldview”(p.5). Complexity theory is the study of dynamic behaviours that interact in an interdependent fashion and act as adaptive agents under conditions of internal and external pressure. In this regard, it is useful to list the three dominant characteristics of complex systems: they involve interacting units, they are dynamic and they are adaptive (Palmberg, 2009)

Complexity theory is based on a number of assumptions.

- Complexity theory does not require co-ordination or input from outside sources (such as a traditional top-down leader) that creates order in behaviour and structure.
- Order can be created by getting rid of energy, which is called dissipating. When a system becomes overly tense or destabilised, a sudden release of energy will occur and a new order will emerge from this dissipative process – it is almost a miniature big bang event. Complexity theory describes this kind of change as emergent, non-linear change.
- Complexity theory argues that the future is totally unknowable, given the nature of dynamic interactions, interdependencies and relationships (such as relationships among stakeholders, workers and leaders) which are influenced, in turn, by random properties. This combination can have a highly unpredictable effect on the future of systems because systems are driven by random dynamics and complex interactions in the network.
- Complex systems are based on chaos and self-organised order. In other words, the systems are continuously changing and yet preserve some degree of structure at all times. Because a system is continuously changing, the outcomes are path-dependent and may be layered with multiple values or “multiple truths” from stakeholders (Houchin and MacLean, 2005; Murray, 1998).

## **Mental Models in a Complex Environment**

The literature does not agree on the form and function of a mental model. Form implies the contents and structure of the mental model, whereas function refers to the role the model plays. For example, are mental models deeply ingrained and relatively stable, or are they unstable? Are they “extremely simple” (Meadows *et al.*, 1974, p.128) or do they range from the simple to the complex and sophisticated (Senge, 1992)? Are they images, facts, beliefs or assumptions, paradigms, cognitive maps or recipes? Should a single belief be considered

a mental model or should the term “mental model” be reserved for a “set of interacting beliefs or network” (Doyle and Ford, 1998)? Does an individual have a mental model referring to one particular type of cognitive structure? Are they images or mirrors or are they declarative knowledge or intuitive knowledge? Are they unstable and ever-changing in the sense that they are being discarded as necessary to solve problems?

The terms archetype, *Gestalt*, worldview, template, schema, mind-set, conceptual framework, paradigm and **mental model** are often used interchangeably, which causes confusion about the exact nature of a mental model (Kilmann, 2001; Marquard, 1996; Rowe and Cooke, 1995; Senge, 2006; Shelton and Darling, 2003). Definitions of a mental model are therefore ambiguous, multidimensional and contingent. Partly because of this inconsistency, the concept of mental models is used by researchers in different contexts for different purposes. For example, Johnson-Laird (1980:100) applies the concept to discuss reasoning, whilst other studies use it to describe human computer interaction. Different meanings could therefore be attached to the term under different circumstances.

It has been established that mental models and change leadership effectiveness are interdependent (Bovey and Hede, 2012; Harrison and Boyle, 2006; Karp, 2005; Osborne *et al.*, 2001). The direct relationship between a leader’s mental model(s) and successful organisational change has also been established (Strange and Mumford, 2002; Osborne *et al.*, 2001). It is postulated that the crucial component of leadership behaviour in an ever-changing environment is the cognitive process of noticing, absorbing and making meaning of environmental change (Barr *et al.*, 1992; Karp, 2006; Lyons *et al.*, 2003. Karp (2006) highlights the dynamic relationship between mental models and change effectiveness and performance when he says: “Each person has an internal mental model of his/her world; a dynamic model that guides his/her thinking and behaviour and that changes as a result of the consequences of that person’s actions and of the information exchanges.”

Leaders often fail to consider alternative models in reasoning and thereby perpetuate the same deductive inferences about a complex situation, because mental models are held in a limited-capacity working memory. Hence, a leader will reduce the cognitive load in an attempt to deal with complexity by integrating new information into an already constructed and simplified mental model.

The challenges that need to be addressed are the following:

- The sense-making functionality of a mental model necessitates that it “manages” complexity by reducing it into chunks, which is not sufficient to make sense of and navigate a complex environment.
- A leader’s perception of reality is a function of his/her categorisation and interpretation processes and, as a consequence, he/she may focus only on things which have already happened and enact the environment. What the leader sees is a construction of the environment, not the environment itself, as Weick’s (1995) theory of sense-making explains.
- A leader may hold an incorrect mental model and draw incorrect conclusions, as discussed in the work of Johnson-Laird (1983).
- The mental model of a leader determines what information will be received and attended to, whilst other potentially emerging patterns may not be recognised.
- Current data may be interpreted in relation to an individual’s current mental models rather than seen as a signal for needed change (Barr *et al.*, 1992; Day and Nedungadi, 1994; Doyle and Ford, 1998; Grosset and Barrouillet, 2003).

Studies show that organisational decline is a result of significant changes in the environment that either go unnoticed, or are improperly interpreted in terms of a leader’s mental model and, as a consequence, are addressed through inappropriate actions (Barr *et al.*, 1992).

## RESEARCH METHODOLOGY

A post-modernist social-constructivist paradigm was used within a qualitative research approach. Finlay (1998:453) argues that when one is studying constructs characterised by ambivalence, unpredictability and contradictions, and when the meanings attached to definitions are socially constructed and can be interpreted in multiple ways, a postmodernist rather than a positive approach is required. A post-modernist constructivist paradigm implies that reality cannot be understood by objectively interpreting meanings, but is rather to be approached by actively co-constructing meaning and reality in the interaction between the researcher and

participants, whilst exploring the research questions. A constructivist approach to grounded theory reshapes the interactive relationship between researcher and participants and, in doing so, highlights the centrality of the researcher as a co-constructer of meaning (Charmaz, 2000; Johnson and Duberley, 2003; Mills *et al.*, 2006; Ponterotto, 2005; Schurink, 2003).

## Target Population and Sample

The population consisted of South African leaders who fit a stipulated profile and criteria. Plummer (2001) suggests that a good participant should be ‘thoroughly enculturized’, ‘currently involved’ and ‘non analytic’, which implies that they should be able to talk about their experiences in raw detail, which is the case in answering the research questions. This was a very difficult task as the sample had to come from a pre-selected few candidates, who complied with the criteria of being perceived as successful leaders in the current South African transformational environment.

Purposive sampling was used because of the specific selection criteria set and the number of participants depended on data saturation, which occurred after seven candidates were interviewed. The researchers have agreed that the participants needed to be information-rich, fairly articulate and have a high level of self-awareness, courage and honesty. Senge (1992) also states that part of being a leader is becoming mature as a human being and gaining life experience. Therefore the participants had to have a minimum of 15 years’ experience in any given industry in the capacity of a leader and had to part of several transformational experiences.

## Data Collection and Analysis

Data were obtained through intensive semi-structured interviews, which imply that only a few research questions were selected to guide the interview, and that the rest of the interview was a co-constructed conversation, which was recorded in audio and transcribed afterwards, with full consent of the participants. The interviews yielded narratives with rich data that were systematically analysed by means of computer-assisted coding (Atlas Ti).

An initial literature study was conducted to assist with the thought process and possible questions for interviewing. Thereafter data collection proceeded and the data were analysed through thematic analysis on the basis of the initial literature review. A second comprehensive literature review was conducted to substantiate the findings and triangulate for better comprehension. This also showed the relevance of the findings in relation to the existing body of knowledge about the form and function of the mental models used by leaders.

There was an interactive and iterative interplay between the data collection and analysis and the conceptualisation/theorising because of the constant comparative method of analysis chosen, as also described by Parry (1998). For example, themes were constantly developed in subsequent interviews as the themes emerged, as advocated by Jootun *et al.* (2009) and McGhee *et al.* (2007). The benefit of this interactive approach to data collection and analysis is that important relationships can be recognised already during data collection. This enables the researcher to reconceptualise and adjust future data collection. In addition, the practice of reflexivity was diligently applied throughout and after the research process. The practice of reflexivity may increase the rigour of the research process, because it enhances the quality of researchers’ understanding of how their position and interest have affected the research process (Johnson and Duberley, 2003; Jootun *et al.*, 2009; McGhee *et al.*, 2007).

In constructing some reality from the data analysis more theoretical questions came to the fore and had to be further researched for clarity in the literature.

## KEY FINDINGS AND DISCUSSION

The findings provide insight into the required form and function of a leader’s mental models necessary to anticipate and lead effectively during complexity. Findings from the in-depth interviews indicate that a

mental model serves as a critical and enabling interpretive and sense-making structure (function), which consists of an unconscious element or tacit knowledge and a conscious element or explicit knowledge (form). A conceptual framework comprising of seven interconnected steps (see FIGURE 1) was created which describes and maps the actual sense-making process of a manager when attempting to anticipate or leading during complexity and change. Key components of the conceptual framework are: a) an active acceptance of the current reality; b) catalytic questioning; c) letting go of; d) knowing that not knowing the solution; e) trusting what they do know; f) observing the actuality of unfolding patterns and g) realisation being elaborated on hereafter.

**The acceptance of current reality** should not be misunderstood as a passive acceptance of or resignation to the current state of affairs. However, not accepting and not knowing will not allow a leader to know how things are, which disempowers the leader in any attempt to seize the actuality of the current “reality”.

**Catalytic questioning** is the second level of sense-making. This implies questioning the mental model with its associated deep-seated assumptions, as well as asking catalytic questions which makes tacit knowledge explicit.

**Letting go** is a critical point in the sense-making process of a leader. Letting go can be compared to the meaning of the mathematical saddle point. A saddle point is the point of intersection between two dimensions, where one dimension curves up in one direction and the other curves down in a different direction, as illustrated in Figure 1. From an energy perspective, the saddle point represents the optimal point of resilience by absorbing and releasing energy, or in this case, letting go. It also represents the crossing over from one reality to another, where new meaning and, as a consequence, a new reality will emerge. Letting go means to actively and consciously let go of previously held assumptions that were deemed “truths” or “facts” about the external and internal landscape of the leader.

Following the act of ‘**letting go**’, **knowing that not knowing** is crucial, because knowing that you do not know will allow for something to emerge. Often clinging to what is known prevents new insights to emerge and the sense-making process as a whole. “Knowing that not knowing” is underpinned by the attitudinal orientation of a beginner’s mind, which refers to the philosophy that there are an infinite number of possibilities. One should therefore not get stuck in “expertise” and “knowing”, because clinging to the security of knowing often gets in the way of “knowing what is not knowing”.

Although there are multiple variables that are not known, there are some variables that can be trusted as “known for sure”. **Trusting the knowing** refers to the act of trusting that all will be OK, that one is operating in a complex adaptive system and that emerging patterns will appear, that multiple truths are part of the experience and of a complex environment. Therefore, one should trust one’s own experience and mental model until they are proven to be untrue. Trusting the knowing is part of wisdom, which can be interpreted in a complex environment as knowing the actuality of things without being caught or misperceiving in one’s own mental model.

Part of a sense-making process, is **observing** and noticing the ebb and flow of the emerging patterns, without getting hijacked into the illusion created by the mental model, and observing the actuality of unfolding patterns.

Sudden **realisation** follows observing. Realisation can be compared to a principle in complexity theory called dissipating. Complexity theory describes this as emergent, non-linear change. Realisation is a dissipative event in itself, due to pressure building up from the movement caused by letting go and knowing that do not know.

The value of a conceptual framework is that it does not aim to predict outcomes in a complex system, but rather offers an understanding of how to navigate a complex environment through the sense-making process. Rather than predicting and forecasting one singular outcome and crafting a predetermined future, such a conceptual framework allows leaders to broaden their viewpoint beyond their fixed notions, based on current perceptions, to what can possibly transpire.

Success of a manager will be determined by their thinking, with specific reference to embodying the roles of: a) sense-maker of emerging patterns by employing mental models strategically and b) facilitator of sense-making in the networked organisation between stakeholders.

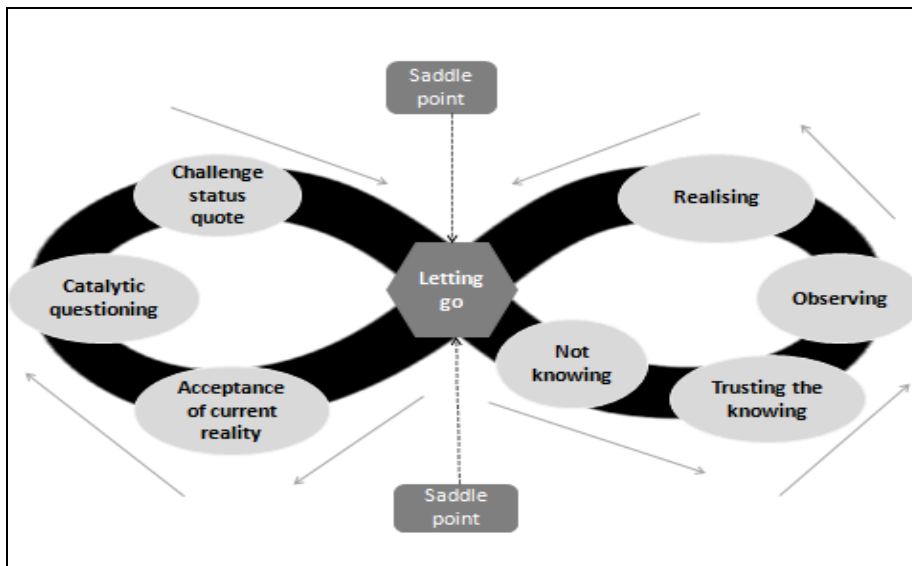


Figure 1: The conceptual framework of navigating sense-making in a complex environment

## CONCLUSION AND MANAGERIAL IMPLICATIONS

Being a leader in a complex environment, the dynamics of the mental model and the complex environment itself collectively represent a constellation of complex adaptive sub-systems, each affecting the others in an interdependent manner and co-evolving accordingly.

The following question comes to the fore: can *sense-making of complexity in a complex environment* be attained by an individual- in this case the leader? The answer is: the key in a complex environment is interdependency; in other words, an individual cannot achieve much on his/her own, but engages in the act of co-creation with others. This brings about the realisation that sense-making is not a luxury, just to be engaged with others at critical times - but the very lodestar of navigation in a complex environment.

Mental models have a dual and paradoxical function. On the one hand, they assist in reducing complexity and thereby enable leaders to make sense of phenomena and navigate accordingly. On the other hand, the effectiveness of the reduction of complexity creates an illusion and allows leaders to recognise and identify data in their search for appropriate data. An existing mental model only allows a leader to rely on data to confirm rather than to challenge existing mental models. The role of a leader is to make explicit his/her tacit knowledge within the mental model.

The contribution of this study specifically applies to the practice of leadership development and coaching. A shift in thinking for leaders and change agents is necessary. The use of existing tools to deal with a crisis or change is no more effective and this paper shows the need for leaders to move towards cultivating a 'change-fit' mental model to anticipate and read complexity within a transformational or crisis situation. Thus managers as leaders of change need to understand that a 'change-fit' mental model is the determining factor for interconnectivity and sustainable organisational change. Therefore, a manager with a change-fit mental model welcomes new ideas coming from any level in the organisation.

A change-fit mental model enables a manager to be resilient (the ability to let go and be stable at points that matter at fractal movement) and therefore adaptable, always moving in anticipation of an emerging and non-linear future. Co-created solutions (acknowledgement that solutions exist at all levels) implies that the change-fit mental model enables a manager to generate complex solutions through and with interdependent, multiple stakeholders with multiple truths and solutions.

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# BASIC STUDY FOR VERIFYING THE ALIENATION OF YOUNG PEOPLE FROM TRAVEL

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## ABSTRACT

*Considering current conditions of consumption behaviors of young people in Japan, those related to tourist behaviors such as traveling or international interactions are in no wise active. Consumption behaviors of young people are changing with changing times, and it seems that this trend is taking root in a sense. Studies will be made while focusing on operations of variables for verification and establishment of basic theories for actual condition surveys.*

**Keywords:** Young People, Travel commodities, Travel agents, IT technology, Financial reasons

## INTRODUCTION

Considering the current conditions of consumption behaviors of young people in Japan, tourist behaviors such as traveling or international interactions are in no wise active. Consumption behaviors of young people are changing with changing times, and it seems that this trend is taking root in a sense. It would be possible to consider that young people are even on the trend of losing their appetite for consumption. This is also apparent from the phenomena of contraction such as reduced purchase of automobiles' reduced sales of alcoholic beverages and reductions in the number of wedding ceremonies. Travel commodity sales are no exceptions and proven by data of the Ministry of Internal Affairs and Communications in the last few years. Nishimura, Takai and Nakamura (2014) call this phenomenon in travel consumption behaviors as "alienation of young people from overseas travel". Effects of this phenomenon are profound and increasing in severity.

The tourism market of young people is not only a current problem but also in view of future market formation. Some experts in the industry say that revitalization of the present market is the very urgent need as stated in the study of Yamaguchi (2010) in order to break a deadlock in current conditions. While Yamaoka (2009) states that young people, the generation of "no consumption appetite", have lost their appetite for consumption itself, Matsuda, Nitto and Hamatani (2013) say "consumption of young people has not stopped but contents thereof have changed". On the other hand, according to a survey of Ohmori (2012), young people would spend money "exclusively on travels and iPads" if they had any money. Reduced demands for travel caused by declines in consumption sentiments, alienation from travels and changes in consumption contents might not only result in a decline of the travel industry but might also keep young people from making international interactions. In a broad sense, when the number of people with global perspectives reduces, it might be that Japan cannot catch up with the world community and it might affect international peace based on mutual understanding. Under such circumstances, the present basic study will verify the repeatedly emphasized actual statuses of alienation of young people from travel with the aim of revitalizing domestic and overseas travels of young people. More particularly, the present study examines prior research in connection with some hypotheses in conducting opinion surveys for comprehending actual statuses. While prior research has tried to find reasons for the alienation of young people from travel, in particular overseas travel, the present study focuses on travel agents who are the general sales promoters as a dominant factor of alienation.

## ELICIT OF HYPOTHESES

Is it true that young people have lost their interest in travel? In fact, the purchasing power of young people has decreased when compared to the past. Whether this is due to financial reasons or to loss of appetite in consumption itself, that is, whether they “cannot” or “will not” spend money, is under discussion. Some researchers define this situation as “no consumption appetite”. There are made hypotheses to find out what the true reason of “alienation of young people from travel” is; whether it is due to reduced motivation of consumption than in the older days or whether the reasons reside in travels themselves. Based on four hypotheses supposing that the primary factor is the problem of travel agents who provide tourist information and arrange travels, the present study will go into further details of backgrounds for eliciting hypotheses 1 to 4 and prior research.

Hypothesis 1: Travel commodities that do not suit tastes affect alienation of young people from travel agents

Morishita (2008) analyses that an inhibiting factor of travels of young people is the “tendency of avoiding unknown things (introversion)”. Introversion is a term used to describe today’s young people in many aspects. On the other hand, many studies have negated that travel itself does not match tastes of young people. According to a research of the Local Distribution Economics Institute (now known as District Economics Research Institute), travel is classified as something young people “want to spend money on in the future” rather than something they “currently spend money on”. While this indicates that there are currently no attractive products and that the priority of travel is low, the market might become active by offering products of their tastes.

Hirooka (2009) reasons that problems reside in product structure and sales techniques. Hirooka defines the method of dealing a large number of people with few hands as a “conventional type travel business” which is one reason of reduced sale and asks for conversion of business models. Some say that conversion to landing type travel business might be a breakthrough solution to prevent losing customers in the conventional type travel business. He points out that the conventional type travel business is a business model with problems for customers of all generations. He has not mentioned any new models in particular for sales in the conventional type travel business. Hypothesis 1 is according based on the above survey of Morishita and Hirooka that travel commodities that do not suit tastes affect alienation of young people from travel agents.

Hypothesis 2: Service that do not match needs of customers affect alienation of young people from travel agents

What are the basic tourist needs of young people? Tanaka and Ide (2011) have elicited the following needs through text mining: “hot spring”-“food”, “transportation”-“enjoyable”, “safety”-“security”, “money”-“cheap”, “food”-“scenery”, “visual field”-“expand”, “not ordinary”-“want”, “individual”-“tour”. It is possible that travel agents do not sufficiently deal with these needs or are not appealing these needs to the younger generation in an effective manner. It is also possible that explanations of differences between travels directly arranged by travelers and those by travel agents are not sufficient. While elicits of Tanaka and Ide are quite natural in a sense, these problems have not been solved by travel agents or could be solved without the help of travel agents, factors that affect alienation from travel agents will be verified starting from these points.

Since the study of Tanaka and Ide is a generalized verification, the study will make verifications by focusing on travel agents. Human service on site is a service that travel agents can currently offer. It also occurs that credit card companies offer various kinds of service to their cardholders. In order to compensate profit reductions through fierce competition before the traveler starts on the trip, travel agents sell optional tours of travel destinations and introduce affiliated souvenir shops, most of which aim to make profits in contrast to service of the above-mentioned credit card companies. Moreover, travel agents have no price advantage over on-site suppliers because of their nature as intermediaries, and people often consider introduction of affiliated souvenir shops as “high-pressure” selling, which customers do not want and which may lead to distrust of travel agents. It is accordingly hypothesis 2 that the current situation in which service does not match needs of customers fosters alienation of young people from travel agents as one can infer from the above prior research.

### Hypothesis 3: The development of IT technology affects alienation of young people from travel

The development of IT technology might affect the travel industry in view of two aspects. The first aspect of IT technology is that as a tool used when people actually go on trips for making reservation or for collecting information. It is, however, another aspect thereof that in collecting information, people can easily find on-site information such as pictures and detailed information and might be already satisfied with “virtual trips”. Even though there are differences between virtual trips and actual trips, people may quite easily feel like they actually traveled, and this leads to some kind of satisfaction without going on actual travels. People can see local European cities and the downtown in New York without actually being there thanks to “Google Street View” which has enabled virtual experiences on personal computers. Ohmori (2012) cites Glolob T.F and defines such phenomenon as “virtual mobility”. This might also be a reason why people do not need “to take the trouble of actually going”. In addition, people hardly crave for things that are unknown to them in these days. Before the Internet became widespread, there was little information about local cities even of advanced countries so that information was valuable, and people relied on postings to “Globe-Trotter Travel Guide Books”. After the spread of the Internet, people can easily obtain information about advanced and developing countries and make virtual travels. Considering expertise of travel agents, the superiority of information by travel agents has relatively reduced in view of providing information prior to trips. Everybody can easily and directly access on-site information by using the Internet. It accordingly seems that the development of IT technology might be the dominant reason of accelerating alienation from travel agents, and this is set up as hypothesis 3.

### Hypothesis 4: Financial reasons affect alienation of young people from travel agents

According to an analysis of Yotsumoto (2012), the Japanese economic environment in view of income has changed between 1997 and 1998. He says that the average wage of the Japanese is declining after 1997. This coincides with the time young people stopped going on overseas trips. Nishimura, Takai and Nakamura (2014)<sup>13</sup> point out that the rate of people leaving Japan has reduced from 24.6% in 1996 to 18.4% in 2008. There are no studies based on such changes in rates of people leaving Japan to clarify both, whether people became alienated from travels due to a kind of “sense of burden” in going on travels or whether they became alienated from travel agents due to unclearness of commissions and travel expenses of tour operators. As it is apparent from prior research from such perspectives, it seems that financial reasons (reductions in disposable incomes/unclearness of commissions of travel agents) affect alienation of young people from travel in no small way so that this is set up as hypothesis 4.

## **PROSESSES FOR VERIFYING THE HYPOTHESES**

### **Arrangement of Question Items**

For verifying hypothesis 1, major question items are for researching attitudes of young people towards travel itself and towards travel agents and surveying images of travel agents and inhibiting factors for going on trips using travel agents at the time of planning. They are further for inquiring about inhibiting factors based on images of travel agents from prior travel experiences arranged by travel agents, and inquiring what kind of service they would like to receive from travel agents or they would evaluate as good and spread by word of mouth or SNSs. For verifying hypothesis 2, the question items are for inquiring service people expect from travel agents and unnecessary service. They are also for inquiring service people can provide on their own and service only travel agents can provide. For verifying hypothesis 3, the question items are for making a general survey related to consumption behaviors using IT and for researching people’s attitudes towards differences between reservation sites of travel agents and sites of facilities (transportation/hotels) or expected service on the Internet. It will be further inquired in details whether virtual mobility on the Internet, that is, the possibility of making virtual trips on the Internet, is an inhibiting factor preventing people from going on actual trips. With respect to hypothesis 4, the question items are for researching the relationship of financial reasons, people’s use of disposable incomes, actual issues of income and consumption behaviors and for researching images of service charges of travel agents among people who have actually used travel agents and those who have not. People’s reliability on travel agents is another object of search.

## Steps up to Verification

Due to differences in circumstances in comparison to groups of young people with occupation, the search will first target on university students. Questionnaires filled out by students at major national and private universities will be analyzed. Methods of analysis will be factor analysis and cross analysis by ages. Similarly, research targeting on working people will be made using the web and in reality.

## CLOSING REMARKS

The aging population and lower birthrate have a large impact also on the travel industry. The sense of value of young people is continuously changing. Changes in minds of young people are apparent not only in terms of travel but also in other fields. As Nishimura, Takai and Nakamura (2014) point out, whether young people go on trips involves a multiplex problem.

Travel agents are not the only planners of travel contents. However, it is true that business activities of travel agents largely affected “sightseeing” in a comprehensive sense. Japan has a long history of travel agents, and some of them are one of the world’s largest travel agents. There are also recently established travel agents who redrew the power map of the industry. Changes in attitudes of young people will occur in any age. It is now of question whether travel agents are keeping up with those changes. The present study will focus on the relationship between travel agents and the younger generation based on hypotheses to start discussing the current problems of travel agents.

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# **THE AUSTRALIAN TRADE COMMISSION (AUSTRADE): EXPERIMENTS IN GOVERNMENT TRADE FACILITATION?**

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## **ABSTRACT**

*The Australian Trade Commission (Austrade) is the government's export facilitator. It was established on the back of the now 80 year old Trade Commissioner Service, an entity which provided a global footprint for Australian exports when trade was in its infancy. Austrade is like its international equivalents but anecdotally considered to be a benchmark operation. When it was established it seemed complimentary to the role requested of it to turn around the poor performance of Australian exports. Throughout the decades it has sought to undertake this task with successes and failures. This paper sets out to identify and analyse the motives for the creation of Austrade and explore the way in which this organisation functioned and developed with contrasting mandates and ambitions in existence. The paper will also seek to highlight the push for a more commercially driven organisation yet still remaining a government statutory authority. This hybrid identity and function, which followed Austrade everywhere, would be its defining asset and contradiction all at the same time.*

**Keywords:** Australia, trade, Austrade, Australian Trade Commission, exports.

## **INTRODUCTION**

The Australian Trade Commission, otherwise known as Austrade, will shortly commemorate its thirtieth anniversary from when it came into existence in January 1986. But it will also celebrate this anniversary under the cloud of the 2014 government Audit Committee suggestion that Austrade be abolished and what needs to be retained, be regrouped into the Department of Foreign Affairs and Trade (Sheridan 2014). This was not the natural intended journey of Austrade when it was established as a statutory government organisation initially tasked with coordinating and facilitating the country's export promotion schemes. Until 1986 Australia's government export promotion functioned with separate operations which included the Trade Commissioner Service, the Export Finance and Insurance Corporation, The Export Marketing Development Grants, the Australian Overseas Projects Corporation and segments of the Department of Trade. The Hawke government reform merged these five organisations into one entity known as Austrade. It was the biggest shakeup to the government trade promotion landscape since the creation of the Trade Commissioner Service in 1934. It was also the Labor government aggressively pursuing a reform agenda as it had in other areas of economic policy and operations typical of the Hawke-Keating period of the 1980s.

Austrade was tasked with helping exporters get into the global markets, be the eyes and ears to better the chances of exports sales. Though at times Austrade had a high public profile, it was media and risk averse often without success. It certainly tried to remain bipartisan in its approach but not always successful and in some cases it was the prisoner of the demands of Ministers across both sides of politics. Most importantly it struggled to balance the two contending pressures ever present in its portfolio: government and business.

The actual establishment of the Australian Trade Commission was decisive in its projection and quick in its execution. While significant discussions were occurring in 1984-1985 between business and government, it was the then Minister for Trade, John Dawkins, after some consultation with sections of business and government (Schedvin 2008), formulated legislation to Parliament for the establishment of an Australian Trade

Commission. By late 1985 it had been accepted by Cabinet and later by the Parliament. It was to be implemented on 1 January 1986. A new era for government export promotion was in the making.

It is common for some researchers to state that their topic is under researched and this paper is no different. The theme of the Australian Trade Commission has received cursory and mostly media attention and limited scholarly scrutiny. This paper acknowledges there is a real literature gap on this theme for reasons which are not yet clear. Nonetheless this paper seeks to partially bridge this gap and promote more scholarly scrutiny of this organisation. The substance of this paper is derived from critically examining reports and reviews of Austrade and its predecessors, and examining some limited archives which have been previously unexamined. This paper sets out to identify and analyse the motives for the creation of Austrade and explore the way in which this organisation functioned and developed with contrasting mandates and ambitions in existence. The paper will also seek to highlight the push for a more commercially driven organisation yet still remaining a government statutory authority. This hybrid identity and function, which followed Austrade everywhere, would be its defining asset and contradiction all at the same time.

## **AUSTRALIAN TRADE BEFORE AUSTRADE**

The Australian trade and export scenario throughout the twentieth century was a story of episodic booms and busts (Mascitelli & Tinney 2012). As Australia was predominantly an exporter of commodities and an importer of manufactured goods it was subjected to frequent demand fluctuations. The domination of wool ended in the 1970s after a glorious century of wool production and the 1980s was a kind of “line in the sand”. At that time the total export dollars registered on the trade balance sheet was close to \$A19 billion. This would grow to \$A52 billion in the early 1990s to a staggering \$A313 billion in 2011 (DFAT 2002; DFAT 2012). One of the key indicators was the importance of China to the Australian economy. In the mid-1980s China’s importance for Australian exports was less than 3 per cent (\$A467 million). In 2013 it reached over 25 per cent (DFAT 2013).

The 1980s is considered by scholars as the decade of significant economic reform and real globalisation of the Australian economy (Kelly 2000; Eslake 2007). Button as a Minister in this Labor reform government of this decade was even more conscious of its significance describing it as:

“The period of real economic change in Australia began in the early 1980s. The need was dramatized by Treasurer Paul Keating’s ‘Banana Republic’ reference in 1985. But Ministers in the Hawke government elected in 1983 had a strong commitment to internationalising the Australian economy” (Button 1994, p. 7).

Within the context of external economic difficulties, the 1980s was the decade where major economic reforms were undertaken. The Australian dollar was floated, where smaller government became acceptable, the (trade union) Accord, freeing up the labour market, tax reform, lowering inflation and tackling high levels of unemployment. At the time of the founding of Austrade in January 1986, exports accounted for less than 14 per cent of the Australian Gross Domestic Product (GDP). While the Australian dollar was favourable for exports (US\$57c) the terms of trade, the ratio of the average price of Australia’s exports to the average price of Australian imports, between 1949-50 and 1986-87 fell by 40 per cent (Eslake 2007). During the early 1980s the Australian economy was running on high levels of inflation almost in double digits and at interest rates up close to 19 per cent (December 1985). There was also concern about “buying Australian” and a fear that the economy and its trade reflection was simply not performing (Capling 2001). Ferris, the future chairman of Austrade noted the “...appalling decline in Australia’s position as an exporter over the last two decades. Australia has, between 1963 and 1986, dropped from 8th to 23rd as a world exporter” (Ferris 1987, p. 36). It is not difficult to conclude that these were not auspicious times for Austrade to be established and make its mark to confront these negative trends.

## **THE MAKING OF THE AUSTRALIAN TRADE COMMISSION**

While Austrade’s beginnings were closely bound with the legacy of the previous 50 years of the Trade Commissioner Service, defined by Schedvin as the “Emissaries of trade” (2008), exporting and the Australian economy had changed considerably since the 1930s. With this new organisation emerging in the 1980s it did so



in an economically challenging climate but to its advantage with an invigorated government ready for economic reform. It was a Labor government prepared to turn the tables economically and ironically do what was more expected of a conservative government. The justification for Austrade when the then Trade Minister Dawkins was preparing his brief was for an organisation which needed to get on with trade promotion as a single entity and at the same time not be shackled with the trade policy. As Ferris reminds us:

“What the act and Austrade initiative was all about was the bringing together of all of those activities and efforts by government into a single organisation with the objective of providing these efforts with a more market-driven and commercial set of disciplines” (Ferris 1993, p.14).

Austrade was officially enacted on 1 January 1986. It would operate with an external board (of business leaders) along with a Managing Director who would report to the board. The key feature of this organisation would be its ability to concentrate on trade promotion and less shackled by government rules and regulations except where it was helpful. This would lead to the Department of Trade as primarily a trade policy entity having lost some of its staff to the newly created Australian Trade Commission. Some posts would continue to play a role in trade policy like London and Rome (where the Food Agency of the United Nations was located) but most would take on the direct role of trade promotion (Schedvin 2008). Alongside the new commercial emphasis, lay an unprecedented blue print of a government organisation needing to be proactive and working with business: matters which probably until then had been anathema for public servants. Despite these admirable ambitions and bubbling excitement amongst the political patrons of this new export agency, it received little mention as one of the reforms of this period and was almost solely noticed by trade pundits and businesses involved in exports. The staffing level of the Australian Trade Commission at the time of its formation was 1,327 of which 137 were actual trade commissioners. The rest of the staff were Australian operations staff and overseas locally employed. The early beginnings of Austrade were far from smooth sailing despite its exciting and exhilarating way in which it came about. There was little in the way of blue print and the Austrade merger of disparate divisions of the export area was equally testing for all.

This newly merged organisation was at the same time a source of political power play between the two sides of Australian politics a position it did not relish. Austrade's predecessor, the Trade Commissioner Service (as well as the Department of Trade) was often considered the play pen of the Country/National Party (Schedvin 2008, p. 314). The Labor Government, both the Whitlam and later the Hawke government had been wary of the long standing Ministry of Trade civil servants as a “National Party Secretariat that looked after pastoralists and mining companies” (Capling, 2001, p. 107). Because of this National (Country) Party perceived bias, there was an inclination to want to break up the Department of Trade, beginning in 1985, and move the Trade Commissioner Service to the Department of Industry in what would become Austrade. However despite appearing to closer to the Labor governments, the reality was that Austrade was more sensitive to the directive of the actual Minister of Trade no matter which side of politics was in power. This political identification changed with the arrival of Minister Tim Fischer who was both a leader of the National Party but at the same time a big believer in the importance of Austrade. What Fischer provided was that closeness to government and political clout that Austrade needed for presence and survival. Equally he broke the thinking of Austrade as a Labor government loyal organisation. Austrade while a government organisation was not a ministry and its representatives wanted a free hand to do business with business. This was resented within the parts of the bureaucracy and primarily within Foreign Affairs. According to one scholar “Some Foreign Affairs officials still look down on Austrade (“they are all cowboys”, a senior diplomat told me) because of the applied, operational nature of its business” (Bartos 2006, p. 62).

Fundamentally even the new Austrade was still in the main run by civil servants with limited or no business acumen. This would change with the first appointments and the structural characteristics that would define this new organisation. As part of the new operation, Minister Dawkins appointed Lindsay MacAlister as Managing Director who was known as having a strong commercial and mining background and commercially oriented to the hilt. He came from Australian operations of General Electric. Much of the early MacAlister period involved introducing many commercially focused approaches which had been quite alien to previous practices. The centre for the Austrade would gradually shift away from Canberra and move more to Sydney. In particular MacAlister introduced a range of new ideas which included organisational performance indicators, performance measurements for managers and cost recovery practices. Some of these changes were profound and alien to the service. However the real development which would prove fatal was MacAlister's inability to

dialogue and understand the Minister's (Button) views on the direction of this new organisation. This new management fell out with Ministerial needs and an inability to cure the needs of the "main stakeholder: the government. The then Minister Button found the leadership of Austrade disagreeable and the task of clarifying the correct direction of Austrade would ultimately be bound with MacAlister's future. For this next step the well-known consulting group McKinsey was brought in review Austrade and its structures. One week before the submission of the report in December 1990, MacAlister resigned.

The resignation of MacAlister in 1990 and the implementation of the McKinsey review saw deep going changes. For the interim while the search for the new Austrade Manager was put in place, the then Chairman of the Board Bill Ferris took the organisation in hand and while implementing the executive search sought to lay some initial foundations of the McKinsey six recommendations. The implementation of McKinsey recommendations which Austrade accepted in total was not without its pain and sacrifice. In Australian operations there were many who feared losing their jobs and in a media release of 14 February 1991 it was reported that "200 jobs to go in Austrade shake-up" (*The Canberra Times* 14 February 1991, p. 11). On the whole overseas operations were less effected in terms of losses and would be the major beneficiaries in terms of new management structure which would come into being. The selection process through executive recruiters took its course and in mid-1991 Ralph Evans was selected as the new Managing Director. Evans came from Vice President of the Boston Consulting Group when it came to Australia in 1990 and absorbed the firm of which he was a Partner/Director. He also ironically had worked with McKinsey & Company in both the UK and Australia.

Evans was quick to get on with the job and especially implement the recommendations emanating from the McKinsey review. The new proposed McKinsey structure of so-called G10 (meaning the 10 managers occupying key geographic and strategic positions, went ahead and top managers were selected one after the other. By 1992 as reflected in The Corporate Plan for 1992-93 not surprisingly called "Really making a difference..." (Austrade 1992), showed that the organisation had certainly set in motion the organisational change requested. Its new motto was "We help win business overseas, and we bring investment to Australia" (Austrade 1992). At the time it had a Board membership chaired by Bill Ferris, but supported by Robert Allen as Deputy Chairman, Ralph Evans Managing Director, Michael Costello from the Department of Foreign Affairs and Trade, Graeme Lawless from EFIC and other powerful representatives from the business community.

With a more confident Austrade pushing ahead, also came a greater level of interference and attacks from political quarters. In the early 1990s as part of its stepped up opposition to the incumbent Labor government, the then Opposition's Foreign Affairs and Trade spokesman Alexander Downer stepped up political attacks against Austrade but really directed at its Minister by then John Button. According to one media report: "Mr. Downer launched an attack on Austrade, saying despite its \$130 million annual budget, it had failed since its establishment in 1986 to increase Australian trade and was regarded by large companies as a 'big dud'" (Connors 1991). The Liberal government's apparent hostility continued throughout 1992 and mostly from Downer. Another report in March 1992, Downer alleged: "Austrade is responsible for promoting Australian exports, yet it has been exposed time and again as one of the most rort-ridden government organisations" (*The Canberra Times*, 28 March 1992). This was most unpleasant and hurtful to the recovering Austrade as it tried to compose itself for the reforms it had set itself to undertake. While Evans reacted carefully, at times he struggled to contain his anger towards the Liberal/National coalition. Evans eventually acquired the label of being unfriendly to the coalition and thereby was targeted himself on the odd occasion.

In 1995 Austrade organised one of the largest international exhibition presences in Australian history at the Information Technology exhibition of CeBit in Hannover, Germany. Over 150 Australian IT companies participated in the largest exhibition in the world with over 6,167 exhibitors from 59 countries located in 33 halls. It was a special year as Australia was designated as "Partner Country" and Prime Minister Keating was special guest. It was ten days of beaverish networking, talking and sales pitch by 700 attendees from Australian companies and more than 50 Austrade staff from across Europe and Australia. It was a declared success bringing \$270 million of business to Australia (Trade Minister Media Release 1995). Despite the over stated dollar returns, it was Austrade at its most impressive under the tutelage of its European Executive General Manger Dieter Le Comte.

In the last years of the Keating government Austrade began to feel some resource cuts which impacted in limited but real ways in the functionality of Austrade. Bob McMullan had been Minister for Trade in the last

years of the Keating period and despite the financial crunch which would come with the Howard government in 1996, the last years of Keating did not save Austrade from further cuts in its resources. McMullan was very supportive of Austrade and emphasized that it was part of the government's economic pillar which was called at the time - Winning Markets (McMullan 1995). But McMullan was a realist and he knew that these limitations on Austrade can impact exports especially for small and medium enterprises:

“The Government and Austrade are committed to assisting you make the most of the opportunities which are out there and assisting you to overcome the obstacles in the path of your success. According to the best estimates, there are some 4500 Australian SMEs regularly engaged in exporting activity, generating around \$6.5 billion in international turnover which is growing at \$500 million per annum. However, it is estimated that these firms represent only 7 per cent of all SMEs engaged in manufacturing and around 1 per cent of service SMEs” (McMullan 1995).

## **AUSTRADE INTO THE NEW MILLENNIUM**

In 1996 John Howard led a decisive victory against Keating to change government and put a Liberal-Coalition government back in power after 13 years of Labor rule. The ripple effects of this victory would be felt across the land, in business and government. Significant changes were afoot including the removal of long standing loyal Labor civil servants. It also shined the light towards Austrade and in many respects would force the departure of Ralph Evans as Managing Director from Austrade. The search for his replacement produced a surprising nomination of field trade commissioner Charles Jamieson. In a media statement from the incumbent Minister for Trade Tim Fischer, he defined the new appointment of Managing Director as:

“Mr Jamieson is a pragmatic and professional trade facilitator who has built a strong reputation around the world in various postings... His recent activities based in Dubai, covering South Asia, the Middle East and parts of Africa equip him particularly well for this position, especially with the India New Horizons project later this year” (DFAT media release 1996).

The period of Jamieson's directorship (1996-2002) would see Austrade make a most effective export enhancement campaign with the important Sydney Olympic Games. Austrade placed itself in a solid position to use the event to boost international business. Utilising the Business Executive brand label, this event allowed show casing like never before to a global audience. According to Austrade:

“The Federal Government's 'Australia Open for Business' campaign generated over \$1.2bn worth of export & investment opportunities during the Sydney 2000 Olympic Games. In 2005, five years after the completion of the Sydney Olympics, the on-going success of the BCA program around other sporting events was officially recognised by the Australian Marketing Institute who awarded Austrade the Australian Award for Innovation in Marketing Excellence” (Austrade ND).

It was common for Austrade to face ongoing public scrutiny and review of its activities. In 2001 the Productivity Commission undertook a review of Austrade and found a third of its \$350 million budget failed to achieve anything. The report said the nation's trade broker, which also supplies grants and information to exporters, was largely unused by its target businesses who were put off by Austrade red tape. It found that exporters were likely to fail or succeed no matter what Austrade did for them (Wright 2001). The Federal Government, a little embarrassed by these findings went quickly to the aid of Austrade and while there red faces for some months, no action was taken by the Federal government and in reality it sought to ignore the Commissions recommendations. During the Jamieson period, Austrade made one of its astute appointments by bringing ACTU Research Officer Tim Harcourt who brought high public profiling and media engagement to Austrade - something Austrade badly needed. For the duration of Harcourt's stay in Austrade, he pounded the media with upbeat stories on the need for exports and the role of Austrade in helping this process. Most prominently his easy to read “Airport Economist” was the manifestation of this approach.

## **CHANGING MANAGEMENT – CLOSER TO FOREIGN AFFAIRS**

Peter O'Byrne took over from Charles Jamieson in 2002 and remained at the helm until 2009. O'Byrne came from small business with significant uphill learning processes both to deal with government and business in a different field from his own. O'Byrne management would face important developments including the Howard government Uhrig review published in June 2003 which recommended the removal of statutory bodies in government and in the case of Austrade lead directly to the disbandment of the Austrade board. Discussing the role of the Board is outside the scope of this paper but it is suffice to say that the role and function of the Austrade Board attracted commentary which revolved around there being "good boards and not so good boards". As a result of the Uhrig Report the Austrade board was replaced from 1 July 2006 by a Chief Executive Officer. This was the last of the one of the old Austrade structures of 1986 in which it too became undone.

Throughout the 2000s Austrade found itself caught up in ethical and governance questions which were both embarrassing and a reminder to Austrade of the need for due diligence. Austrade's loyalty to Ministerial directives was the most likely cause for Austrade finding itself in this dilemma. Hansard reports Labor Parliamentary Kelvin Thomson pointing the finger at Austrade in his speech to the House of Representatives when he said:

"The recent AWB scandal has raised several serious governance and accountability questions for the Australian Trade Commission and, so far, we are yet to hear answers to these questions. Austrade has been peculiarly silent about AWB providing hundreds of millions of dollars in kickbacks to Saddam Hussein. The fact is that Austrade, the Australian Trade Commission, was one of many government agencies that were aware of substantive information about the link between Alia, AWB, Saddam Hussein and the coordinated subversion of the UN's oil for food program" (Thomson.2006).

Throughout the 2000s a new corporate scam was emerging in the name of Firepower. It had the ability to draw in and dupe many across the high end of Australia – corporates and politicians alike. However its ability to achieve acceptance and corporate legitimacy came when "An unlikely saviour in the form of the Australian Trade Commission" (Ryle 2009, p. 93) in the form of one John Finnin. This episode which has been described as "The most spectacular fraud history in Australian history" saw Austrade between 2004 and 2006, reportedly granted special access privileges and funds totalling \$394,009 to Firepower International. It also involved employment to two former senior Austrade managers in Europe and Russia (Ryle 2007) which hurt Austrade and caught it off guard. In July 2009 Austrade was rocked by one of its first fatal casualties within its organisation with the death of Trade Commissioner Craig Senger killed in Jakarta at the Marriott Hotel along with two other Australians as a result of Jemaah Islamiyah bomb planted in the hotel. This shook Austrade and especially the Jakarta office with ripple effects on other senior management.

The year ended with O'Byrne's resignation and the hunt for a replacement was back on the agenda. The incumbent from Foreign Affairs Peter Grey emerged as the new CEO but with a mandate to yet again review Austrade. Changes were yet again afoot the most far-reaching in more than two decades which provided for, amongst other things, a smaller international executive group (Austrade Annual Report 2010-11). As softly announced by the Austrade Annual Report for 2010-11:

"strengthened executive management of the organisation through a smaller executive group, meeting on a weekly rather than monthly basis a global rather than regional management structure with strategic management and oversight of the international network based in Austrade's headquarters clearer lines of responsibility for Austrade's core functions—trade, investment and education—and for the EMDG scheme renewal of indicators of organisational effectiveness during 2011–12 to better reflect the organisation's strategy and directions, including incorporation of governance considerations" (Austrade Annual Report 2010-11).

During Grey's leadership education as a service had acquired critical importance. By 2010 education services as an export had become the fourth largest export (after iron ore, coal and gold). This prompted the government to shift the promotion of international education to Austrade from the Department of Education, Employment and Workplace Relations. Austrade took the challenge with gusto and in many markets it elevated the responsibility to senior management. As part of enhancing the Education portfolio Austrade introduced a new education brand, Future Unlimited in June 2011.

In the meantime Austrade continued the rollout of the Australian Government's Brand Australia program both in Australia and internationally. The Australia Unlimited nation brand was implemented at a range of major events, including the China International Small and Medium Enterprises Fair, business events in New Delhi during the Commonwealth Games, and at the Forbes Global CEO Conference in Sydney. In Australia, the brand has been used across a range of sectors, including clean energy, ICT, biotechnology, film, visual arts and publishing.

In late 2012 Grey resigned and was congratulated by the then Minister Emerson of the Gillard government as having accredited with "Austrade's resources ...more keenly focused on helping Australian businesses break into frontier and emerging markets, particularly in Asia... This shift in focus fits with the vision set out in the Government's Asian Century White Paper" (Trade Minister media release 2012). The Peter Grey management and in 2013 his replacement by Bruce Gosper was seen by most as lurching back to DFAT and moving away from the philosophy and structures of a trade promotion organisation envisaged in 1986. Not all were comfortable with this repositioning.

## CONCLUSION

Only four per cent of all Australian companies actually export (Mascitelli & Tinney 2012). This is in line with US and Canadian levels. European levels are much higher and on average range between 25-45 per cent of all companies in European countries. The fact that such a small number of companies export, linked to the question of government support to promote these exports, is not one that all governments share and certainly not in the same way. The debate is one of how far government should intervene in the economy, an issue of topical significance in Australia and to organisations like Austrade as they are the means through which government try and influence the levels of exports emanating from Australia. Austrade management has always indicated it cannot be all things to all people. Its ability to genuinely impact the trade scenario is limited and mostly to those 4,500-6,000 companies that are export ready and that approach Austrade on a yearly basis for export assistance. While much rhetoric is consumed on the benefits of trade, the concern expressed by government of the costs involved in providing this service is equally as strong.

Since the implementation of the Australian Trade Commission Act, four governments and eight trade ministers have come and gone across both sides of Australian politics. However the Audit Committee report may be the "writing on the wall" for Austrade that its future may be linked to a return to DFAT. It has struggled to balance the two contending pressures ever present in its portfolio: government and business. The beginnings of Austrade as a new government export facilitator was ground breaking and exhilarating at the same time. While starting with great uncertainty and driven often by personal initiative, Austrade was firmly on the road to a stronger government role in promotion of exports and investment. It pursued a more aggressive commercial approach and began putting in place many features of commercial operation within a government department. Much of Austrade's initial design was focused around individual input and drive starting with Minister Dawkins through to Bill Ferris and Ralph Evans. After a difficult start with leaders poorly suited to the juggling role required of Austrade, the McKinsey recommendations ultimately drew the line in the sand of what Austrade should do and how it should do it. The choice of Ralph Evans from a business consultancy background provided a fresh new direction and especially implementation of the McKinsey recommendations. While the Howard government of 1996-2007 would be seen as the villain of future cutbacks of Austrade, the decline in funding began in the later years of the Keating administration and the operational difficulties for Austrade were already evident in the mid-1990s. While Austrade was already in that decade punching above its weight it could not and would not escape its Ministerial clutches and with the Howard victory fears for Austrade's survival was on the table. The arrival of Tim Fischer both as Deputy Prime Minister and Minister for Trade in 1996 while politically located in the traditional and conservative camp was a god send for Austrade for a Minister who despite everything was able to approach Austrade with fresh and sympathetic eyes and believed in the values of the organisation. Ironically Austrade regained positioning in the eyes of government which continued throughout the Howard period which ultimately came to an end in 2007. The Labor led Rudd government, alternating with Julia Gillard, saw little improvement for Austrade and again saw itself at the service of a demanding Trade Minister rather than to the export business community. The 2014 release of the Audit Committee findings that Austrade should return to the Department of Foreign Affairs and Trade might not be a total surprise to many. However the

recommendation for the downsizing and removal of Austrade is ill conceived and short sighted. The final verdict remains to be seen.

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# **AN EVALUATION OF THE PUBLIC-PRIVATE PARTNERSHIP IN THE LEKGALAMEETSE NATURE RESERVE IN SOUTH AFRICA**

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## **ABSTRACT**

*This article examines a public private partnership (ppps) project meant to develop the local community in a nature reserve. This study is qualitative and quantitative in nature, and used face to face interviews and a questionnaire to collect data. The article argues that the limited success of the project is largely attributable to the unequal power relations in the partnership, coupled with capacity limitations in terms of governance and management of resources. The major contribution of this article is a model of public private partnership which espouses the following principles: symmetric power relations; learning and re-learning; inclusion; community capacity enhancing; exercise of community power; collective participation and control; collective benefits and community self management.*

*Keywords:* Sustainable partnerships, protected areas, community development, poverty alleviation

## **INTRODUCTION**

The Republic of South Africa is endowed with a diverse and rich biodiversity which has a great potential for economic growth and sustainable development. South Africa is rated number three in the world in terms of its biodiversity following Indonesia and Brazil (UNESCO, 1996). In order to achieve environmentally sustainable development, protected areas have been designated as a priority area for development of the domestic and international tourism industry.

Apartheid created a country with different levels of socio-economic dimensions created by policies which led to the dispossession of the majority of people from their lands for agricultural and conservation reasons. Since 1994, the South African government has pursued a development path designed to achieve social and economic transformation of the economy. Transformation aims to stimulate the economy in order to create means to improve the quality of life of all citizens and by so doing, to redress the fundamental challenges of gross inequalities in society created by apartheid. As such, Government promulgated policies which attempt to also improve the social and economic conditions of communities that are adjacent to nature reserves.

A major challenge in the country is that in most cases, nature reserves have been established without due consideration for communities adjacent to them. Such an approach has tended to marginalize instead of improving the livelihoods of local communities and reducing poverty. These reserves have not benefited them even though private tourist operations have profited significantly. This has created some tension between the locals and conservation agencies which affects the success of the protected area. Kepe et. Al., (2005) contend that addressing the immediate and long term needs of the poor, while at the same time conserving the environment is not an easy task. They explain that it requires commitment and compromise from all stakeholders where necessary. Armitage, Berkers and Doubleday (2007, p. 4) share a similar perspective when they point out that although technical expertise is important in policy decisions regarding partnerships on natural resources, increasingly, their success depends more on negotiation and agreement among the key stakeholders who consist of government, communities and the private sector.



The state plays a major role in protecting the biodiversity of the country, promoting economic growth and sustainable development, and in implementing poverty reduction programmes that are in line with community development. The National Environmental Management Protected Areas Act (NEM: PAA) calls for the sustainable use of protected areas for the benefit of the local people should be promoted (South Africa, 2003). It mandates the government together with its national and provincial tourism and conservation agencies to promote both biodiversity conservation and rural development. In the case of Lekgalameetse Nature Reserve, the Public Private Partnership was established precisely to pursue such developmental goals. Wolmer and Ashley (2003, pp.34-39) reinforce this idea when they argue that it is the responsibility of the state to create maximum benefits for communities next to nature reserves, especially in cases where they have rights over land and where the state controls competitive sites as this creates hope for improving rural livelihoods.

## BACKGROUND

Partnerships are defined in different ways in the literature. They are seen as a kind of relationship, joint management, collaboration between parties. Bramwell and Lane (2000) define a partnership as regular, cross-sectoral interaction over an extended period of time between parties, based on at least some agreed rules or norms, intended to address a common issue or to achieve a specific policy goal(s), which cannot be solved by the partners individually and involving pooling and sharing of appreciations or resources, mutual influence, accountability, commitment, participation, trust and respect and transparency. Despite the variety of terms used, the core elements of a partnership are that it involves a relationship among stakeholders, where some kind of pooling of resources, time and energy occurs to achieve similar goals (Bramwell & Lane, 2000; Gray, 1985; Selin & Chavez, 1995).

Partnerships exist at different levels and take different forms, but they have in common the expectation that the participants can achieve their objectives more effectively and efficiently through strategic alliances with others rather than acting independently. This 'collaborative advantage' (Huxham and Vangen, 2000) is attained by pooling complementary resources and sharing risks and rewards in the joint undertaking (Warner and Sullivan, 2004). Collaboration with a wide range of stakeholders can facilitate a move towards sustainable tourism (Bramwell & Lane, 2000; de Lacy, Battig, Moore, & Noakes, 2002).

The current land debate in South Africa has implicated existing private companies as claims are made on some parts of their land. The apartheid system in South Africa created a situation in protected areas were often strictly fenced off, with little or no positive interaction between protected areas and adjacent communities. Adjacent communities were restricted from gathering customary resources such as traditional food, firewood for fuel/energy and medicinal plants as it was considered to be illegal. Communities had an opportunity to claim their land in terms of the Restitution of Land Rights Act (No 22 of 1994 as amended) in which most of the protected areas were affected. The act provides for the restitution of land rights to communities which were dispossessed after 1913 as a result of discriminatory laws that were executed without compensation.

Successive democratic governments believed that co-management in a form of partnerships should be the preferred option in terms of land claims. The People and Parks programme prioritized land restitution in protected areas as its main focus, which culminates in co-management, access and benefits sharing including community-public-private-partnership (PPP) models. These models are aimed at balancing the objective of biodiversity conservation with increased local economic development and poverty alleviation. Wolmer and Ashley (2003, p. 37) are of the view that the right of participation in protected area management will increase with ownership. With the current heated land debates in South Africa, it is in most cases difficult to balance the interest of communities and conservation agencies when land is set aside for conservation (de Villiers 2008). The models of community-based or pro-poor tourism being promoted as development options have very limited, and very mixed pedigree and it remains to be seen whether they can deliver the anticipated benefits. 'If they fail to succeed on sufficient scale, or if the benefits are not widely distributed within communities, the pressure for direct access to land for subsistence that drove many of these claims in the first place is likely to resurface (Lahiff 2002, p. 20).

Carruthers (2007, pp. 296–297) argues that protected areas are widely viewed as cash cows for economic development and service delivery, rather than biodiversity protection or ecosystem services luxuries.

As a result, there have been cases of conflicts often resulting in destruction of environmental resources. Over and above the incentives faced by particular organisations to participate, the proliferation of partnerships can be interpreted as part of a broader shift in governance, or the process of giving 'direction to society' (Rhodes, 1997) through the interplay between government, business and civil society. Partnerships can sometimes be seen as a new model of governance, referred to as 'new', 'collaborative' or 'network' governance, among other terms (Moon, 2002; Donahue, 2004; Ruggie, 2002).

The private and public institutions realised the need to forge close relationships with communities adjacent to their projects in protected areas by involving them in conservation activities to allow the benefits to flow to the communities. Ojwang, (1999) acknowledges that through integrating the local communities into these projects, private and public institutions are fulfilling a social responsibility of creating development opportunities for the impoverished rural communities adjacent to their projects and thus view their contract partnership with the communities as a tool for rural development.

The government views partnerships as a mechanism for facilitating the social and economic empowerment of rural communities. The government of South Africa acknowledges that in addition to other sectors, the conservation industry has a significant role to play in rural development (DEAT, 1996). The industry considers the government's role as that of creating an enabling environment for the development of the sector in a way that is equitable and sustainable. Benner et al, ( 2004) argue that partnerships are being established as a response to gaps in traditional governance models, especially with regard to the limited – and some argue declining – ability of states to devise and implement rules or to provide public goods in the increasingly global and complex interactions between social, economic and environmental systems.

## LITERATURE REVIEW

There are a number of partnership formations or methods that can be used in protected areas or nature reserves, depending on the level and kind of venture and the benefits thereof. In this study we are only going to concentrate on one *model of partnerships* which is common in protected areas in the Southern African region, which is co-management. Co-management is occasionally referred to as participatory, collaborative or joint management (Berkes & Henley 1997, p. 29; Kepe 2008, p. 314).

There are many definitions of the term 'co- management' but it is commonly regarded as a middle-range management option between state and community management (Isaacs & Mohamed 2000) which suggests and encourages participatory democracy, power sharing, local incentives for local use of natural resources, and decentralisation of resource management decisions (Kepe 2008). Greater participation by resource users and landowners in management activities and the integration of local values and knowledge in decision-making processes are recognised as necessary and beneficial (Berkes and Henley 1997, p. 31; Hauck and Sowman 2005, p. 2). In the year 2007, the Department of Land Affairs and Department of Environmental Affairs and Tourism signed a Memorandum of Agreement (MoA) which led to the cooperative national approach to the resolution of land claims in protected areas (South Africa, 2007). The use of the co-management method was considered the best strategy in the MoA to reconcile land restitution in protected areas (Kepe 2008, p. 312).

The dawn of a new democracy country in 1994 led to a number of new policies and laws for natural resource management influenced by international debates and trends which supported the principles of equity, social justice, participation, environmental sustainability, accountability and transparency (Hauck and Sowman 2005). Co-management is described in Section 42 of NEM (South Africa 2003).

Normally, the right of participation in protected area management increases with land ownership (Borrini-Feyerabend et al 2000, p. 24; Turner et al 2002, p. 3). The management capacity of the landowners also determines the level of participation. Landowners also have to choose how much they can/want to invest in co-management, and thus how much risk they are willing to take. According to Berkes (1997, p. 6), co-management is feasible only if at least four conditions are met. These are the presence of appropriate institutions, trust between partners, legal protection of local rights, and economic incentives for local people. Due to land restitution, land ownership in protected areas in South Africa often changes from state land to private land and therefore this feature needs to be taken into consideration, as it influences the resource and land rights.

In South Africa cooperative co-management is promoted as the preferred settlement option within the land restitution process in protected areas. A recent example is the joint conservation management initiative of the Makuleke region of the Kruger National Park by the government and the community. Private investors are expected to join the partnership for further development of the area. The community now owns the land after a highly successful claim from the Kruger National Park through negotiations (Koch and Massyn, 1999).

Isaacs and Mohamed (2000, p. 2) are of the view that 'The ability to move beyond the limitations of either state, private or community management is seen as a key benefit of co-management'. Increasingly, co-management is seen as an alternative to resource management that joins the interests of government (to achieve efficiency and sustainability) with those of landowners and resource users (who have concerns for self-governance, active participation and a variety of livelihood issues) (Hauck and Sowman 2005). In this case, co-management was being implemented.

## METHODOLOGY

This article used essentially a qualitative approach. Such an approach was deemed appropriate in order to gain insight into the partnership agreements and relationships. Face to face interviews with a number of villagers and other key stakeholders were undertaken. A qualitative method relying on in-depth interviews provides a way of collecting information on the knowledge, values, opinions, attitudes and experience of the target group (Neuman 2000). This allows participants to speak about their experiences in their own terms and words. As it is common, qualitative approaches are relevant (Wilson & Little, 2005), this means relying on rich, thick descriptions and quotes from the interview scripts (Hollinshead, 2007).

In-depth interviews were used and interview sessions were arranged with respondents concerned. The researcher also used questionnaires to collect data on the impact of the public private partnership, the benefits as well as developmental issues of concern. The sample was selected using purposive sampling. Preference was given to key informants, that is, participants actively involved in the partnership and people who were part of the community partnership forum. A sample of 40 people was selected comprising people from reserve management, the Limpopo Tourism Agency (LTA), Limpopo Department of Economic Development Environment and Tourism (LEDET), community leaders, thirty community members and two co-management members. Of particular importance was the reserve management which has insight into the daily activities which were taking place between the reserve and the surrounding communities; the Limpopo Tourism Agency and LEDET managers are responsible for facilitating the partnership, while the co-management members represent the communities concerned regarding management issues of the nature reserve and the community members as key stakeholders.

In-depth interviews were used to obtain information from interviewees, namely LTA, LEDET and Trust committee members. According to Kumar (2005), "one of the main advantages of a structured interview is that it provides uniform information, which assures the comparability of data". Self-administered questionnaires with questions that allowed community members to fully express themselves and give detailed information were used and distributed to them during community meetings which are held on monthly basis in their respective villages with their chiefs. Texts, views, expressions and opinions were analysed using content analysis as it is one of the most appropriate methods under the circumstances for qualitative data. Each interview was coded soon after transcription. An emergent, interpretive approach was adopted to provide a framework for transcript analysis and theme development (Neumann, 2000; Strauss & Corbin, 1998).

## RESULTS AND DISCUSSION

According to the interpretive analysis of the stakeholder interviews, three key themes emerged which defined the nature and quality of the partnership between the government and communities adjacent to the LNR. The themes relate to; (a) partnership development and management, (b) stakeholder benefits, and (c) sustainability.

The land claim was lodged in 1996 and was facilitated by government departments headed by the regional land commissioner. The communities were encouraged to claim their land for compensation and benefits attached to the land claim. The intention for the land claim was for restitution, because the land is declared a protected area making physical occupation of the land was impossible. According to members of the co-management, the management is still struggling to be serviced in terms of agricultural activities as part of the land is for agricultural purposes. Members of the co-management expressed the view that they experienced many challenges during the process of lodging a claim but received the support of the land commissioners. In compliance with the National Co-management Framework, they meet quarterly to discuss issues affecting the LNR and also said that the partnership is gaining momentum and that they understood the challenges much better. However, there was a sense that there is a lack of coherence between land ownership and biodiversity management as there was evidence of some confusion on the expectation of the communities and frustration on the part of the management agency of the nature reserve on what each should do. According to the LNR Strategic Plan (2013-2018), there is evidence that the management agency of the nature reserve and the communities agreed on erecting a new fence to manage livestock and poaching from taking place in the nature reserve. This suggests that stakeholder consultation and support is an important aspect of effective protected area management as misunderstanding can easily scuttle the project. It is also a requirement in terms of Sections 39(3) and 41(2)(e) of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003). A majority of the respondents agree that they were involved in the partnership from the onset. This implies that there was meaningful participation from the beginning of the PPP. While job opportunities in the community were mostly offered by commercial farming ventures comprising both temporary and permanent employment, migration to urban areas for employment purposes was widespread due to limited opportunities in the area manifesting in a high unemployment rate. Respondents complained that their objectives centred on employment creation, opportunities for firewood collection and grazing of their livestock more than anything which were largely being unmet. Therefore, the expectation was that the partnership should impact livelihoods in terms of job creation and spaces for grazing and firewood collection. The limited number of people who were benefiting from the partnership were those who, essentially, were indirectly employed which meant that their future was not guaranteed as they depended on occasional work which is provided by the nature reserve.

The interview data sourced from members of the LNR Co-management committee provided an understanding of whether there were benefits accruing to the community and issues of sustainability and impacts. It emerged that many community members were being employed in land care programmes such as Working for Water and Expanded Public Works Programme (EPWP). This was an indication that these programmes have the capacity to employ about 70 people on seasonal basis in the nature reserve. The committee members were also of the view that more can be done in terms of effectively involving the communities in equity partnership and concessions opportunities. However, the partnership has not created adequate jobs to cater for the adjacent communities as community members were not given preference regarding permanent employment and huge development projects/tenders in the nature reserve. Additional information gathered from the respondents suggests that LNR through its co-management committee, conducts annual assessments on beneficiation and sustenance of the partnership in relations to the socio-economic impact in the adjacent communities. It was stated that the management authority is not effectively implementing decisions that are taken in the co-management meetings suggesting that there is tension in the management processes of the project. Further analysis, based on the data collected and general comments made by respondents, it can be adduced that the majority of the surrounding community members, in general, welcomed the partnership process and have confirmed that this partnership has the potential to bring about change in terms of how they look at conservation and management of a protected area. Evidence shows that a larger number of the participants in this partnership is adults and pensioners as compared to the youth. This may work against efforts to build this community because for sustainable community development to take place, all the stakeholders in the community must be involved especially the youth for them to be able to sustain the legacy. A number of community leaders, who were involved in the partnership formation, spoke of the partnership formation process as “frustrating”, “complex” and “time-intensive”. Such that some of the community members lost interest in the partnership before the implementation process was concluded. Some of the claimants “say they were not involved in the partnership in the initial stages due to the fact that they are replacing family representatives who are no longer available due to ill health or have passed on”.

The management agency also said that most of the community members do not understand the implications of managing a protected area and the legislation involved in creating such a partnership.

While the process of preparing and lodging of land claims was exhausting, the claimant's spoke of the helpfulness of the Department of Rural Development and Land Affairs, and the Land Commission in assisting with information and the process of how to lodge claims. "The Land Commission were of great support and help in terms of information and guidance we needed when lodging a claim for our land" (Claimant). Justifiably, claiming of a protected area must conform to the National Environmental Management of Protected Areas Act. Ironically, the act restricts claimants from physical occupation of the land as most claimants were of the view of using the land for physical occupation, farming and grazing. The formation of the partnership was drastically delayed due to lack of knowledge and desperation of farming and grazing land.

As such, the respondents were of the view that government is biased resulting in their wishes being sidelined. For instance, they claimed that the nature reserve should create more employment opportunities, increase allowance for firewood collection, and grant them permits which would allow their livestock to graze in the protected area. The communities and the management agencies came to the common understanding that a land claim of a protected area is not like any other land claim where claimants can decide what to do with the land after a claim is successful. Hence, the partnership was formed and gave the adjacent communities an opportunity to become stakeholders in the development and management of the LNR.

The day-to-day management of these engagements created new challenges for stakeholders, particularly regarding issues related to employment and access to resources in the LNR. The majority of the respondents were unemployed and with little influence on the employment of community members. In some cases, adjacent communities felt that they should be given preference when it comes to tendering and employment opportunities. Their frustration is encapsulated in the following excerpt: "LNR management hires outsiders even though it is manual job that can be performed by people residing in the surrounding communities" (Claimant).

There were cases where LNR gave tenders to the local people. This meant nothing to local people as they claimed that the big contracts are given to outsiders. One respondent said "from a business point of view it is useless to give a contract to an outsider who comes with his own people to work in our nature reserve, whilst we have people who are capable to do the job for less".

Some respondents were generally satisfied with the partnership and credited it for its role in local economic development. However, the employment figure shows that the majority of the society in the adjacent communities is economically inactive. They believe that there is a very strong correlation between the PPP and their economic growth which can be achieved with resources sharing and additional income accruing in form of contracts.

The evidence also indicated a strong link between partnership development, and governance (management) and sustainability of socio-economic and environmental issues of the nature reserve. The effectiveness of the LNR partnership is still questionable because the governance and benefits issues of the nature reserve are not clearly articulated and understood by all stakeholders especially from representatives of the management agency and the community by their own admission.

From the data that is available, there is proof that the partnership was developed and implemented in a professional and harmonious way. However, the community representatives in the co-management team are of the view that what is agreed upon in their meetings is not implemented by the representatives of the management agency (LTA and LEDET).

Members of LTA and LEDET management considered the partnership to have succeeded in improving management of the protected area. Admittedly, the relationship between the management of the nature reserve and the community has improved and the Community Property Association is of the same sentiments with regard to the management of the nature reserve.

The fact that the land claim process went well and that the management agency for the nature reserve and the claimants formed a co-management agreement is important. This meant that the community is ready and willing to work with government to continue protecting the natural resource in that area. Both the management

agency (LTA/LEDET) and the community representatives must work very hard to make sure that challenges that are experienced are ironed out.

## **TOWARDS A MODEL OF PARTNERSHIP IN PROTECTED CONSERVATION AREAS**

Given the situation in the LNR, we posit a model for Private Public Partnership which supports:

- Symmetric relations – because co-management assumes two or more stakeholders, the power relations should be level to ensure genuine engagement for the common good;
- Learning and re-learning – there are lessons to be learned from the engagements. This means that stakeholders must be willing to learn and re-learn in order not to commit mistakes previously encountered;
- Inclusion – the engagements must be inclusive of the adults, the youth; the community and implementing partners and so forth, without alienating any other party;
- Community capacity enhancing – the engagement should enhance the community's capacity to lead and manage themselves and their projects;
- Exercise of community power – in their collective, communities must exercise power through their structures which give precedence to their needs and priorities;
- Collective participation and control – control must reside in communities to encourage participation of community members as the resources belong to all.
- Collective benefits – benefits must accrue to the largest number in the community and as such eliticism should be discouraged.
  - Community self management – is elaborated in Table 1 below. It shows the advantages and disadvantages of co-management arrangements versus community self management.

**Table 1: Co-management and community self management**

<b>CO-MANAGEMENT</b>	<b>COMMUNITY SELF MANAGEMENT</b>
Give instructions to communities	Communities self rule and govern which raises their self awareness
Creates community subservience	Community are in control of their destiny and projects
Disempowers communities	Empowers communities
Can cause social and cultural conflicts over jobs and resources	Conflicts over jobs between locals and outsiders are avoided. This does not mean that conflicts within will be eliminated.
Creates its own level of bureaucracy	A layer of bureaucracy is removed in self governance.
Encourages eliticism	Eliticism may be avoided depending on how the arrangements are configured.

Source: Authors

In cases of community self management, there is potential for communities to be independent both economically and financially through the exercise of community power in decision making. Community self management also facilitates collective management of community resources through nurturing leadership which avoids the exploitation of locals and encouraging community entrepreneurship. The assumption of control and ownership by communities enhances their self-esteem and sovereignty. However, some of the disadvantages of community self management and ownership include the removal of the incentive to work as an individual and creation of dependency.

## **CONCLUSIONS AND RECOMMENDATIONS**

In line with the findings, Brawell and Lane (2000) are of the view that collaboration with a wide range of stakeholders can facilitate a move towards sustainable tourism. The partnership that is created in the LNR and other protected areas that are under land claims, should be able to address the socio-economic issues of all stakeholders and move beyond the thinking of land owners and management agencies. However, it is important to acknowledge that communities will always have higher expectations when ever partnership of this nature is

formed especially due to their social and economic background and historicity associated with land ownership in South Africa. While the management agency must continue with their legislative mandate of the protection of biodiversity that is found in the LNR without compromise it should be inclusive in its decision making processes, involve the communities in the design and implementation of economic programs beneficial to them and understand the needs of the local community in terms of culture and traditions. As such It is imperative for the management agency to fast-track the issue of involving private partners for developmental purposes as the process to bid for the development of the economic hubs within the precinct of the nature reserve is long overdue.

The settlement and co-management agreements, together with the management plan, should be able to provide the framework for coordinated and proper management. This will avoid unnecessary tension between stakeholders. The management agency should implement a capacity building initiative on co-management, tourism and conservation. The management agency is an equal co-management partner with the claimants and therefore should not intervene in the internal business of the land claimants and vice versa.

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# THE SOCIO-ECONOMIC IMPACTS OF SOUTH AFRICAN COAL MINING INDUSTRY

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## ABSTRACT

*Coal is one of the oldest mining enterprises in South Africa and became the primary source of energy in 1923. The commodity has remained a catalyst for socio-economic development since then. It is presently complemented with cleaner renewable sources such as solar and wind. Coal is non-renewable energy source with massive carbon emissions blamed as one of the causes of global climate change. There are 73 collieries in South Africa with the bulk of them in the Mpumalanga coalfields. Approximately 75% of coal production is consumed locally mainly for electricity generation and production of synthetic fuels and 25% is exported.*

**Keywords:** coal mining, electricity generation, socio-economic, supply-chain, synthetic-fuels

## INTRODUCTION

Coal has continued to play a significant role in the socio-economic development of South Africa since its discovery over 100 years ago. It has been and has continued to be instrumental in the industrial, agricultural and social development in the country.

The socio-economic impacts of the industry are experienced through the complex supply chain whereby most customers are also the major consumers of the commodity. The state owned energy company Eskom consumes approximately 50% of the coal produced in South Africa for the generation of electricity. The other major consumer is the synthetic fuels producer Sasol followed by steel manufacturers, cement factories, aluminum smelters and homes.

The other beneficiaries of the coal supply chain are the logistics company including the state owned rail logistics company Transnet, the privately owned Richards Bay Coal Terminal and a number of Third-Party Logistics companies which run fleets heavy trucks. The rail and road transport supply 30% of the coal consumed by the power stations.

Over 80 percent of South African coal is produced by five leading international natural resources companies and 20% by smaller black empowerment companies also known as junior miners. The coal produced is 75 percent for domestic market and 25 percent for export market. The industry beneficiaries include the employees and the communities where coal mining and processing take place.

## PROBLEM STATEMENT

The problem statement for the study was to establish the socio-economic impacts of coal mining industry supply chain in South Africa and show need for improved collaboration and integration by the role players in both public and private sectors to enhance the output and economic benefits.

## **THE PURPOSE OF THE STUDY**

The purpose of this study was to establish how coal mining and its supply chain impacts on the socio-economic aspects of South Africa. The use of coal for generation of electricity, production of synthetic fuels, coke for industry and home use were observed.

## **METHODOLOGY**

This study has adopted a qualitative research paradigm. According to Cooper and Schindler (2008: 162-168) the outcome of the qualitative interview depends very much on how the researcher prepares the participants for the interview. 'Qualitative research has substance, gives insight, shows sensitivity and is unique in conceptualization, yet grounded in data' (Corbin & Strauss 2008: 302).

A purposive sampling process was used for the selection and profile of participants. The process aimed to enhance understanding of the selected people or groups as they were selected for a specific purpose, task or expertise in research. 'The researcher should be in a position to expound the use of purposive sampling in order to instill confidence and validity for research findings' (Devers & Frankel 2000: 264-265). The participants for this study were the top professionals who were also involved in decision making in their organizations in order to provide credibility to the study. There were 14 respondents earmarked for this research and 13 of them comprising 4 Chief Executives and 9 senior professionals in the mining and affiliated industries responded.

### **Sample and procedures**

In order to obtain access to individuals and institution, the researcher is required to obtain permission from gate-keepers of the target institutions (Ehigie & Ehigie 2005: 622-623). The permission to conduct research either oral or written is paramount (Cooper & Schindler 2008: 37). The objectives for the research were addressed at the initiation stage as the researcher approached the institutions' gate-keepers by stipulating the value proposition for the study, purpose and ethical considerations that also addressed the 'informed consent' (admissibility for research process). The researcher presented an introduction letter from the Vaal University of Technology stipulating the purpose for the study that included confidentiality undertakings and the use of audio digital data recorder for recording of the interviews.

### **Data analysis**

The research data was collected from the respondents using the audio digital data recorder and from the field notes. The collected data was transcribed and content analysis was used for the translation and analysis. The emerging themes and sub-themes were recorded and evaluated establishing the socio-economic impacts of the industry in South Africa.

### **Reliability and validity (Measures of Trustworthiness)**

The reliability and validity of data from this study were ascertained through triangulation: comparing data from the interviews, feedback from the participants and from the literature. 'Multiple sources lead to a better understanding of the phenomena being studied' (Willis 2007: 219). Triangulation enhances validity and richness of data by looking at issues from different angles (Lee & Lings 2008: 239).

### **Ethical procedures**

According to Eriksson and Kovalainen (2008: 68) research is vulnerable to 'lies, fraud and wrong-doing' hence, ethical adherence is paramount. The ethical issues for this study were addressed through the research introduction letter stated above.

## **RESULTS**

The findings revealed the socio-economic impacts of coal mining industry and role players to the society and the country. Four major themes emerged out of the study that included coal as a commodity, legislative environment, industry role players and the environmental issues. Emanating from the broad categories that were identified were several sub-themes and they are expressed in Table 1.

**Table 1: Themes and Sub-Themes Emanating from the Interviews**

THEMES	SUB-THEMES
Coal: origin, reserves, quality, business model, production, consumption and trade (economic benefits/welfare of employees and communities)	<ul style="list-style-type: none"> <li>- Coal and its properties, reserves, production, consumption and trade</li> <li>- Employee satisfaction</li> <li>- Community welfare</li> <li>- Environmental impacts</li> </ul>
Legislative environment (MPRDA, NEMA, NERSA)	<ul style="list-style-type: none"> <li>- MPRDA Act of 2002</li> <li>- NEMA Act of 1998</li> <li>- NERSA</li> </ul>
Role players: coal mines (private), Transnet - rail infrastructure (public) and South African Chamber of Mines (private)	<ul style="list-style-type: none"> <li>- Coal mines</li> <li>- Transnet (rail transport)</li> <li>- South African Chamber of Mines (advisory role to the mining industry)</li> </ul>
Environmental issues: pursuing green management issues as per legislations, funders and social responsibility. Committed to “cradle to grave” philosophy of green environment	<ul style="list-style-type: none"> <li>- High carbon energy environment: carbon emissions, dust, noise and diesel pollution</li> <li>- Inappropriate road transport of coal</li> <li>- Circle of commitment: ‘cradle to cradle’ and ‘cradle to grave’ ;building carbon credit through reduction of carbon-dioxide, product re-use, recycle, rehabilitation (soil, water, mines)</li> </ul>

**Source:** Mathu (2011: 222-223)

## DISCUSSION

A number of factors indicating the socio-economic attributes of the South African coal mining industry supply chain emerged from the interviews conducted with professionals who are also involved in decision making in the industry and the role players as elaborated herewith.

### The socio-economic impacts of coal mining in South Africa

According to the respondents the coal mining impacts on the general economy of the country, supply chain partners' employees and communities around the mining and processing areas. The stakeholders include mines, power stations, Third-Party transporters, government, Chamber of Mines, harbours and rail transport company Transnet.

### Coal and its properties

Coal is a fossil fuel and a primary source of energy in South Africa. Coal is formed from accumulation of dead vegetation over many years, undergoing a slow decaying process turning into peat that transforms into coal seams , hence the slow formation process renders it as a nonrenewable energy source (Abbott, Apostolic, Goodman, Hortsman, Jenner, Jewell, Labhart, Maragos, May, Sunderman, Parke, Stein, Wengler & Went 2009: 53).

South African coal is associated with the Karoo rock formations which extend over the present day Free State, Mpumalanga, Limpopo and Western Natal. The chemical composition and properties of coal determine its usage. South African coal is less reactive, harder and has lower sulphur content compared to coal from the Northern hemisphere. The bulk of South African coal is bituminous or thermal grade suitable as fuel for electricity generation and anthracite suitable for metallurgical plants (Lang 1995: 20).

## **South African coal reserves**

South Africa coal reserves is approximately 30 408 million tons and the sixth largest in the world. The coal reserves are found in Mpumalanga, Free State, Limpopo, Kwa-Zulu Natal and Limpopo coalfields (DMR 2009:44).

There were 73 collieries in South Africa (Prevost 2009: 27). Most of them are owned by the five leading mining companies that produce over 80 percent of coal in the country and the others are owned by smaller mining companies (Black Economic Empowerment) also called junior miners. The national distribution of the collieries are: Free State (2); Gauteng (1); Kwazulu-Natal (7), Limpopo (2) and Mpumalanga (61). The five leading mining companies involved in the exploitation of coal from these coalfields are Anglo Coal, BHP Billiton, Exxaro, Xstrata and Sasol (DME 2007:44).

## **South African coal mining business model**

The South African coal mining business model for domestic consumption is based on three stages: mining process, transportation to the domestic customers/consumers and the processes at the customers' facilities who are usually the consumers. The export coal is transported by rail to the main coal export terminal at Richards Bay along the Indian ocean coast of Kwa-Zulu Natal and shipped to the markets abroad.

### **Stage 1: Mining**

This comprises mining, beneficiation and stockpiling.

### **Stage 2: Distribution (Transportation)**

There are four types of transport modes for both domestic and export markets namely conveyor belts, rail, road and water. The power station coal is delivered direct from the stockpiles and does not go through the beneficiation process. The bulk of the power station coal is delivered via conveyor belts. The rest is delivered by road and rail. The export coal is taken through the beneficiation process and delivered to the export terminal by rail. The other domestic customers are supplied by road and rail.

### **Stage 3: Coal Customers**

The domestic customers for coal are the power stations, Sasol (petrochemical industry), steel, cement, aluminium smelters, traders and homes.

## **COAL PRODUCTION**

South African coal production has stagnated since 2004 while consumption by Eskom has risen to meet the continued rising power demand. The scenario puts Eskom in competition with the other domestic consumers, resulting in price hikes and this has forced Eskom to use discarded coal from the big coal exporters in order to meet their requirements. The demand will continue to outstrip supply for some time until new coal mines come on stream (Smuts 2008:36). Presently, Eskom is building two giant coal-fired power stations Medupi and Kusile which will be completed in stages from 2014 (Eskom 2011: 88-89).

## **COAL CONSUMPTION**

There are two categories of coal usage in South Africa namely domestic and export markets.

### **1. Coal for the generation of electricity (Eskom)**

The state owned energy company Eskom consumes approximately 50% of total coal produced to generate electricity. Presently it has 13 coal-fired power stations that generate 88% of electricity in the country. (Eskom 2009: 226). Eskom is one of the top 10 utilities in the world by generation capacity (Eskom 2009: iii). Eskom's total nominal generation capacity is 44 193 megawatts (MW) (Eskom 2009: iii). Eskom uses a network of national grid to transmit and distribute power directly or through municipalities. The national grid comprises 395 419km power lines (Eskom 2011: 169).

### **2. Coal for production of liquid fuels and petrochemical products (Sasol)**

South African Synthetic Oils (Sasol) converts coal into synthetic fuels and petrochemicals using Fischer-Tropsch technology. It contributes one-third of national liquid fuels and 4.7% to growth domestic product (Sasol 2012: 11). The technology used at Sasol is heavy in carbon emissions making the company one of the leading in the global carbon emissions (Sasol 2008: 83).

## **COAL TRADE**

The South African coal serves both domestic and export markets. The domestic market consumes 75% mainly through electricity generation, synthetic fuels production and use in heavy industry as coke. The other 25% is exported to markets in Europe and Asia (Prevost 2008:7).

Presently, the price of coal is USD 82.31 which is equivalent to ZAR823.10 at the exchange rate of R10 for 1USD (Coal Trader 2013: 1).

## **LEGISLATIVE ENVIRONMENT**

The South African government uses the following legislations to direct the mining industry:

- The Department of Mineral Resources (DMR), previously Department of Minerals and Energy (DME), uses the Mineral and Petroleum Resources Development Act (MPRDA) – Act 2002 (Act No. 28 of 2002) that was promulgated in April 2004 in the administration of the mining industry (Government Gazette 2010:
- The Department of water and environmental affairs (DW & EA) ensures that mines has environmental management plan (EMP) based on the principle of integrated environmental management as provided by the National Environmental Management Act (Act No. 107 of 1998) NEMA (Government Gazette 2010: 3)
- The National Energy Regulator of South Africa uses Act, 2004 (Act No. 4 of 2004) to regulate energy. , (NERSA 2009:11-15)

## **THE KEY ROLE PLAYERS IN THE SOUTH AFRICAN COAL-MINING INDUSTRY SUPPLY CHAIN**

They comprise mining companies, government departments responsible for minerals, energy and environmental affairs; domestic and export coal customers; rail logistics company Transnet; the main coal export terminal Richards Bay Coal Terminal and the Chamber of Mines of South Africa.

### **1. South African coal mines**

The South African coal mines are predominantly situated in the Mpumalanga coalfields where most of the coal-fired power stations are located. The future of South African coal mining is in Waterberg coalfields in the Limpopo Province as depletion has commenced in the area (Eskom 2011: 88).

## **2. Transnet (rail transport)**

‘Transnet is a South African government-owned rail logistics company that also runs the ports and harbours. Its main role in the industry is transportation of export coal to the harbor and some to power stations (Transnet 2009:2). One of its business units Transnet Freight Rail (TFR) runs the rail system (Transnet 2009: 2).

## **3. Richards Bay Coal Terminal (RBCT)**

The Richards Bay Coal Terminal is the biggest coal terminal in the world and has a handling capacity of 91mtpa and has plans to expand to 110tpa (Kolver 2014: 1).

## **4. Chamber of Mines of South Africa**

The Chamber of Mines of South Africa is a voluntary membership private body coordinate research and bridges between the government, labour unions and the mining industry (Chamber of Mines 2009: i).

# **The future of coal mining in South Africa**

With the depletion of coal in the Mpumalanga coalfields, the future of coal mining in South Africa is in the Waterberg coalfields in Limpopo Province. That calls for rapid infrastructural development in that area as they are still underdeveloped. The coal reserves at Waterberg are estimated to be 3.4 billion tons (Prevost 2008: 6-9).

## **LIMITATION OF THE STUDY**

The study being qualitative and energy related was great cause for limitation as energy production is sensitive to the state as it is key to national development. A total number of 14 respondents were planned and 13 of them became available after strenuous efforts.

## **RECOMMENDATIONS**

The study recommended the review of South African mining policy and the industry transformation into public-private partnership model in order to enhance integration and collaboration. Improved collaboration will reinforce operational effectiveness, efficiency and profitability (throughput).

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# LEADERSHIP, TALENT ATTRACTION AND RETENTION

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## ABSTRACT

*New paradigms constantly appear in a globalized world, with a more innovative and more sustainable business environment, which cause huge economic, social and technological changes. In this competitive scenario, where probably only win who is faster and more competent, organizations need to act strategically in order to achieving and maintaining success relative to its competition. Companies seek qualified and committed employees, rather than unmotivated human resources. Organizations need to make efforts, especially through the leadership, so that they can retain talented employees, who are their intellectual capital. The leaders have to recognize that are these talents, the most motivated and committed, those who make all the difference. Thus, leading the talent has become the most important task and one of the biggest challenges for managers and organizations. No one doubts that the high rates of turnover, at present or in the future are certainly undesirable and turn into high costs for organizations. The leaders probably are the most responsible for the maintenance of the talents, for the use of the maximum skills of people in the workplace and also for the motivation and commitment of talented employees to achieve the goals, the strategies and the objectives of the companies. Therefore, nowadays, it is necessary for those who occupy management roles, to become leaders and implement this leadership. The main purpose of this empirical research was to determine the effect of leadership in attracting and retaining talent. The concepts and results related to the themes were studied and analyzed, using as base the literature review of respected authors in this research area. The methodology applied consisted of a questionnaire applied to the 100 best companies to work in Portugal in 2013, where we sought to understand if policies for attracting, developing and retaining talent, advocated by the theory, are implemented. The results suggest that the leadership is fundamental in retaining talent. Another conclusion obtained is the importance of other factors, like career development, teamwork, accountability, job satisfaction and other benefits, in addition to monetary compensation. It also showed that when the human resources policies, which aim to attract and develop talented employees, are applied, those employees remain longer in the organizations and they have a higher organizational commitment. In terms of originality, this paper aims to create discussion about the relationship between leadership, talent attraction and retention, as competitive advantage.*

**Keywords:** Leadership, Human Resources, Attraction and Retention of Talents

## INTRODUCTION

From the end of the last century, globalization has caused many changes in the paradigms of leadership, as well as in administrative practices, giving rise to a highly competitive world. In the search for competitiveness, organizations create solutions that provide better performance, the commitment of the most talented employees and the optimization of skills, looking for a real competitive advantage.



In front of different paradigms, such as resource scarcity and technological competition, it becomes necessary to identify how the current leaders positively or negatively influence the retention of talented people. Mitchell, Holtom, Lee and Erez (2000) found that personal and organizational costs are very high when a talent decides to leave the organization. For them, it is understandable that retaining talent must be monitored at board level of organizations. These authors consider that the issues that most have stimulated researchers and leaders are: Why do talented people leave? Why talented people remain in companies? For them, the answers to these questions have to do with job satisfaction and commitment to the company, otherwise they do not remain in the organization. To Monday, Steers and Porter (1982), being committed means the identification and involvement with the company, leading the individual to make considerable efforts to benefit the organization.

The objective of this research is to identify whether leaders influence positively or negatively the attraction and retention of talented employees in the organization. To achieve the general objective, the research will examine the relation between the profile of leadership and the retention of talent in the company. This research intends to investigate the direct relationship of leadership with three indicators: motivation, employee commitment and the effective intention to leave the company.

## **LITERATURE REVIEW**

### **Leadership**

Stogdill (1974, p. 259) consider that “there are almost as many definitions of leadership as there are persons who have attempted to define the concept.” According to Hartog and Koopman (2011) the most representative leadership definitions are:

- Leadership is the influential increment over and above mechanical compliance with the routine directives of the organization (Katz & Kahn, 1978).
- Leadership is the process of influencing the activities of an organized group toward goal achievement (Rauch & Behling, 1984).
- Yukl (1998) broadly defines leadership as influence processes affecting the interpretation of events for followers, the choice of objectives for the group or organization, the organization of work activities to accomplish the objectives, the motivation of followers to achieve the objectives, the maintenance of cooperative relationships and teamwork, and the enlistment of support and cooperation from people outside the group or organization.
- Leadership is defined in terms of a process of social influence whereby a leader steers members of a group towards a goal (Bryman, 1992).
- Leadership is the ability of an individual to motivate others to forego self interest in the interest of a collective vision, and to contribute to the attainment of that vision and to the collective by making significant personal self-sacrifices over and above the call of duty, willingly (House & Shamir, 1993).

Leadership is the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation. (Hersey & Blanchard, 1988: 86). Kotter (1990, p. 3) defines leadership as “a process that helps direct and mobilize people and/or their ideas”. To Schein (1992) Leadership is the ability to step outside the culture, to start evolutionary change processes that are more adaptive. Northouse (2007, p. 3) asserts that leadership is a process where by an individual influences a group of people to achieve a common goal. Four elements seem common in many definitions of leadership:

1. Process: Leadership is a process, an interactive event and not linear between leader and followers;
2. Influence: The process involves influence, since the leader behavior is influenced by elements of the group and vice versa;

3. Group: Leadership occurs in a group context, being it small or big, but cannot be individual;
4. Objectives: The process of leadership refers to the achievement of concrete objectives which means that the leader must direct the energies of the group to achieving a particular common goal.

For some authors, leadership has usually been seen as the ability to control others and leadership could be an innate quality possessed by some persons, while others acquire it, and some other have it thrust upon them due to circumstances in which they find themselves. According to Cashman (2010) to answer the critical challenges, the leader must explore eight principles of leadership: character, intention, connection, ethics, agility, resilience, formation and presence. One of the most accomplished attempts to organize the literature on leadership was to use a system of classifications based on the types of variables used in the theories or studies, creating four approaches:

- Trait theory
- Behavioral theory
- Contingency theory
- New theory: positive leadership, multiple leadership, charismatic leadership, transactional leadership, transformational leadership.

In this research the focus will be the New Theory, in particular theories such as transactional, transformational and charismatic leadership, because this leadership profile has characteristics considered most effective in retaining talent in organizations.

## **Talent Attraction and Talent Retention**

The emphasis on the skills issue is relatively recent and represents a paradigm shift in organizational management, it is to maximize the competitive advantage of organizations through the management of human capital. The literature on talent not allows us to set limits on the conceptual theme, since there are various definitions and interpretations of the theme.

Lewis and Heckman (2006, p. 140) identified three interpretations of management and talent: the first was to replace the term "human resource management" by the talent management; the second aims talent management as an area focused on "Projecting employee/staffing needs and managing the progression of employees through positions" and the third focuses only on managing talented people, which means that companies must fill the positions with "A" performers (Smart, 1999). This latter approach is very limited because it is not desirable to fill all positions with highly talented people. The context in which companies operate is constantly changing, human resources are required with special ability to adapt and therefore the notion of talent is gaining importance. Scullion and Collings, (2006) reported that the great challenge of today is to find workers who have the right skills to perform tasks anywhere in the world. The company's competitiveness (multinationals or local companies) is therefore dependent on its ability to have talented workers (Huselid, Becker & Beatty, 2009; Guthridge et al, 2008).

This issue of talent attraction appears in the literature mainly in three approaches: an approach that considers that there are several types of workers in companies, some more talented than others and, therefore, more valuable (Huselid et al., 2009). According to this approach, companies efforts should focus on management and attraction of these workers. On the other hand, an approach that considers that talent management must be global because all workers are valuable (Guthridge et al, 2008).

We found yet another approach that tries to combine the two previous approaches, since it considers that there should be differentiated proposals for the attraction and retention of workers with different talents. These approaches are evident in companies that use different tactics for recruitment to select workers with different profiles (recruitment in schools, head hunting, advertising, etc.). Some authors have reported that companies that choose talent with the right skills are those that are more successful (Guthridge et al, 2000). If in the short term, the choice of the right talent can be a competitive advantage, in the long-term competitive

advantage that may change, because the talents can be attracted to move to other companies, more attractive (Daniels et al, 2007; Porter, 1985). Therefore, companies must be prepared to respond to this cycle of change, continually attracting new talents.

Fuller & Farrington (1999) consider that it is needed to attract, retain and develop talent, and this is the biggest challenge of human resource managers. Talent requires inspiration, space and time. Olsen (2000, p. 24) states: "The Company's traditional department-oriented staffing and recruiting process needs to be converted to an enterprise wide human talent attraction and retention effort". Other authors argue that talent retention is achieved through training programs and appropriate development (Cohn, Khurana, and Reeves, 2005, p. 64). Among the many authors there is consensus that with the artists, the talent should be sought, hired, managed and rewarded through differential compensation. Retaining talent is one of the biggest challenges of talent management. Strategies for retaining talent are therefore increasingly complex and include a strong commitment to top management so that all employees are managed as talent.

## **EMPIRICAL RESEARCH**

### **Sample**

The initial sample consists of 100 Portuguese companies considered the "Best Companies to Work" in Portugal, in 2013. This classification is awarded annually by Exame Magazine and the Consultant Accenture. From this total sample we obtained a total of 44 responses, corresponding to the same number of subjects of analysis.

### **Instrument**

As a tool for validating these properties we used a questionnaire that has been developed by the authors. To facilitate analysis, we divide the global instrument in various groups of questions: The first part aims to collect socio - demographic data, the second part consists of 26 items about leadership and the third part consists of 27 items on the attraction and retention of talent.

The questionnaire consists of statements about the applicability of each parameter to the business context of each company, according to a Likert scale of 5 points (1 = never applies, 2 = applies somewhat, 3 = moderately applies 4 = applies very much and 5 = applies completely). We conducted a questionnaire pre-test in a convenience sample consisting of 10 companies in the same sector of the main sample. The questionnaire was sent by email to the universe of sample requesting its completion by the largest number of employees from the "100 Best Companies to Work", in 2013. The data has been collected between 7 and 29 October 2013.

### **Hypothesis**

Hypothesis 1: Leadership has a direct correspondence in the attraction and retention of talent in organizations.

Hypothesis 2: The most important factors of attraction and retention of talent are not the only factors of monetary policy, there are others.

### **Statistical Procedures**

Initially, we applied most of the descriptive statistics concerning the variables assessed using Likert scales. Considering the recommendations of some authors, we considered the cluster analysis as an appropriate statistical procedure for conducting an exploratory analysis of the data, thus we have made a cluster analysis by the ascending hierarchical method. Subsequently, we determined the internal consistency using Pearson's correlation coefficient. Reliability was determined using Cronbach's alpha coefficient. The significance level to reject the null hypothesis is  $p < .05$ , which corresponds to a probability of wrong rejection of 5%. We concluded this analysis with a Principal Component Analysis (PCA). For statistical data, we used the computer software SPSS - Statistical Package for Social Sciences, version 19.0.

# RESULTS

## Socio – Demographic Variables

Of the 45 respondents in this study it was observed that the highest percentage (26.7%) are between the ages of "30 Years to 34 Years." The majority of respondents of gender "Male" (77.8%). Of the 45 respondents (91.1%) belong to the "Effective Boards". In the variable "time in the Company" the largest percentage (48.9%) corresponds to the respondents in the company "Between 3 Years and 10 Years." In the variable "Time in Current Role" the largest percentage (40%) reflects individuals' Between 6 months and 3 years. " The majority of respondents (75.6%), have a degree.

## Cluster Analysis

The cluster analysis allowed us to identify four clusters.

Cluster I - This cluster reveals the link between leadership and talent management: overwork, pressure to achieve goals, the lack of good benefits and remuneration conditions and lack of leadership in taking decisions. When the leadership is weak, talents tend to go out of the company.

Cluster II - This cluster evidences the importance of an attentive leadership, with expressions of personal and group interests, as well as an effective leadership in representing the group hierarchy.

Cluster III - This cluster evidences the direct relationship between leadership and talent management: leadership makes the delegation of powers, recognize and appreciate the work and effort individual and team, get the respect of followers, increases the desire to achieve success, and develops a taste for teaching the value of professional qualification of workers and expressed satisfaction when others meet expectations.

Cluster IV - This cluster evidences a direct relationship between leadership and talent management. Leadership is considered effective if it is reliable and if it is a reference to the employees, representing values that are important, encouraging to go beyond what is expected, valuing the work, helping employees to develop their strengths and being effective in fulfilling the needs of the company.

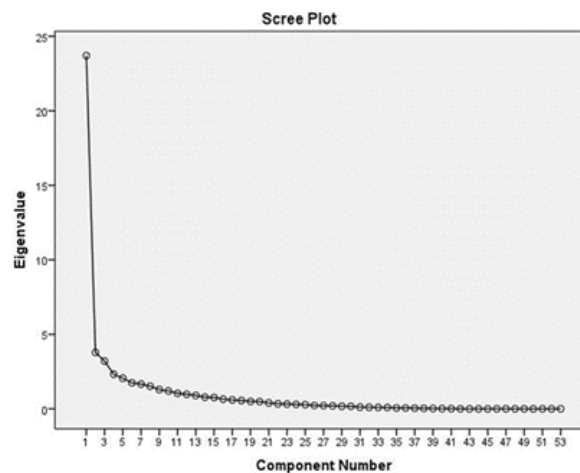
## Reliability and Validity

When calculating the matrix of correlations between items of the clusters, we found that some variables were less than 0.3, but Cronbach's alpha reliability coefficients are averaged 0.7 and 0.9., so as we considered that all the variables were relevant, we didn't eliminate any item. We conducted a Principal Component Analysis to explore the setting of the questions and we verified the existence of latent variables that explain the total variance. When applying the Principal Components Analysis, we verified that the first component explains a very large percentage of the variance of these variables together. The results point to the extraction of 11 factors that explain about 82% of the total variance. If we consider only 8 factors, the variance explained by this model, would correspond to about 70% of the total variance - see scree plot that corroborates this analysis.

# CONCLUSION

From the analysed literature, we can conclude that it appears that Talent Management is a new and very important concept in the area of Human Resource Management. The psychometric properties (reliability and validity) of the questionnaire used were validated. The internal consistency of the variables was verified based on correlations and Cronbach's alpha, considering that the internal consistency should not increase when the indicator is eliminated. The factorial structure was examined using the extraction method of Principal Components. Considering the formulated hypothesis:

**Table 1 - Scree Plot With Total of Variance Explained**



Hypothesis 1: Leadership has a direct correspondence in the attraction and retention of talent in organizations. This hypothesis was confirmed, i.e. there is a direct correlation between the leadership and the attraction and retention of talent, since we obtained a percentage of 80.76% of responses, ranging between 4 = applies very much and 5 = applies completely. This percentage appears on factors such as: ethics, reference values, trust, responsibility, respect, etc.

Hypothesis 2: The most important factors of attraction and retention of talent are not the only factors of monetary policy, there are others. This hypothesis was too confirmed, since we obtained a percentage of 70.38% of responses, ranging between 4 = applies very much and 5 = applies completely.

Thus, there are other important factors such as recognition and merit, professional development, personal and professional development, policy differentiation, career planning, quality of work life, etc. The results suggest that leaders influence positively and negatively the retention of employees. They retain talent if they have effective leadership at groups' level, whether they are efficient, able to delegate tasks and responsibilities. If the leadership policies are weak or even absent, leaders can't effectively retain talented employees.

We found that there is a relationship between transformational and charismatic leadership and retaining talent, because these leaders are able to change and transform, have a spirit of cooperation, align the goals of organizations with employees, are inspirational and an intellectual stimuli.

The degree of importance among the determining aspects in retaining talent in the company, are: 1 - The benefits and non-monetary benefits; 2 - Progression in career; 3 - Good work environment, stability and security; 4 - Responsibility to fulfil their tasks; 5 - Remuneration within the parameters of the market.

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# **RATIONALIZATION OF SCHOOLS IN THE NORTH WEST PROVINCE: CONCERNS AND FEARS OF STAKEHOLDERS**

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## **ABSTRACT**

*This study explores the understanding, concerns and fears of stakeholders in the Kgetleng River Area Office (AO) on the rationalization of schools. Participants were 64 in all comprising 4 principals, 20 teachers and 20 parents who were school governing body members and 20 learners. There were 38 females and 26 males with ages ranging between 14 years and 55 year. Participants indicated their views on a Likert type scale on their concerns and fears about the rationalization of schools. As the scale was author developed, validity and reliability of scores from the scale are reported. Results indicated that three subscales emerged, where participants saw rationalization as (a) threatening the use of school buildings (b) as a threat to the quality of education that they were going to get (c) rationalization as tempering with the prospects of promotion and maintenance of present posts the study also depicted that even if rationalization was a departmental imperative, stakeholders felt that there was a lot to lose than to gain. It can thus be recommended that further studies should be conducted to determine the efficacy of the questionnaire used here in other contexts and samples.*

**Keywords:** Rationalisation, schools, concerns and stakeholders

## **INTRODUCTION**

The North West province in South Africa is mostly rural (Department of Education, 2012). The larger part of this province was part of Bophuthatswana before it (Bophuthatswana) ceased to exist in 1994 due to political changes in South Africa. The coming into being of the new South Africa changed a lot of institutions and education was part of the new changes to be effected Dieltiens (2005). In the erstwhile Bophuthatswana, schools were divided into four types. These were the Early Learning Centres (ELC), the Primary schools starting from grade 1-6, the Middle schools starting from grade 7-9 and the High school starting from grade 8-12. The coming into being of a new South Africa after 1994 meant that the education of the entire homelands which Bophuthatswana was part of, had to change. The changing of the political landscape in the whole of South Africa led to a situation whereby Bophuthatswana as a homeland was no more and most areas that made it were now called the North West province.

## **Theoretical Framework**

The process of rationalization of schools is informed by various policy dictates, but primarily the Ministerial Committee on Rural Education (2005) that proposed that all public or ordinary schools should be primary (grade R-7) or High schools (grade 8-12). Rationalization is the process through which this end is being achieved. The main intention of the Department of Basic Education (DoBE) is to align the schooling landscape (Botha, 2004). In the province, this started in earnest with the publication of a Gazette on school merger in 2007, Rationalization of Schools in the North West Province (2013-2016). The North West province, unlike other provinces in South Africa has a different type of schools including Middle schools, which constitute a unique feature in the schooling landscape since the new dispensation does not cater for it. What is actually happening is

that rationalization in schools have revolved around middle schools, thus ignoring the broader goals of rationalization of schools which includes amongst others: to address the challenge of non-availability, dysfunctionality and general inefficiencies occasioned by the current schooling landscape. This study looks into rationalization of schools, looking specifically on the middle school and how stakeholders feel about the merging of school. Stakeholders in this study are limited to educators, parents of learners (specifically those serving in school governing bodies) and affected learners. National Guidelines on school types provides the opportunity to streamline the process of rationalizing schools in the province. These guidelines essentially make provision for two types of public schools in the province viz. primary and secondary schools. Combined schools can only be retained or established with the permission of the Member of Executive Council responsible for education. Rationalization of schools is also expressed in legislative frameworks of the constitution of the Republic of South Africa, 1996 (Act No.108 of 1996), National Education Policy Act, 1996 (Act no. 27 of 1996), and the South African Schools Act, 1996 (Act No. 84 of 1996) - Section 6 and Section 12A which deals with Merger of public schools. At this present moment, the North West province education landscape still carries with it the remnants of the legacy inherited from the past dispensation. That is, the North West province still has middle schools. Types of schools differ according to districts and even Area Offices. The process of rationalization seeks to align schools to the National Policy on Types of Schools which maintains that only two types of public schools must exist, namely, primary schools and the secondary schools.

## **Reasons for rationalization**

Rationalization was brought about since not all schools have Grade R as per Draft National Strategy on Early Childhood Development (Laying Solid Foundations for Learning. Version 6 of December 2011) as well as Action Plan 2014, Outcome no. 11; Middle schools where grades overlap between traditional and secondary schools (inherited from former Bophuthatswana) ; Harmonising the curriculum bands and phases; Grouping appropriate learner age and stage groups; In line with Action Plan 2014. Towards schooling 2025 (outcomes 1-13) address the challenges of the provision and quality education. Rationalization of schools in this study has to be understood in the context that it is there to establish primary and secondary schools according to national specifications. The expectation is that this process will improve the quality of education, expedite the resourcing of schools, promote access to schools and sustain learner numbers and the employment of educators in schools.

One needs to understand that the actual rationalization of schools is directed by policy from the Department of Education North West. This means that implementation thereof, has to be in line with guidelines provided by the provincial department. Amongst others, in executing school rationalisation at circuit level, a task team for every circuit office has to be established. This task team composes of the Area Office manager, circuit managers of affected circuits, labour unions and the office manager for the admin and support staff. The duty of the office task team amongst others is to establish an Area Office (AO) database of all public schools. This database has to include the demographic infrastructural and legal ownership of the property. Their role is also to consult with local municipalities in order to ensure that the rationalization and closure of schools are aligned with municipal integrated development plans. They also have to consult with all stakeholders at the level of Area Office during which they will give recommendations regarding the position of the principal, other school management positions and the allocation of teaching positions. The AO task team has to ensure that employees are assisted and professional support for educators moving from one school to another and ensure that affected learners and schools are provided with necessary resources. Since some schools are going to be closed during rationalization, it is the responsibility of the AO task team to make recommendations on the utilisation of closed school buildings and see to it that all asserts, liabilities, rights and obligations of merged schools are well managed in accordance with the procedures stipulated in Section A, 37 and 58 of the South African Schools Act (SASA). Written records of all processes regarding rationalization has to be kept by the AO task team and they also have to monitor and evaluate the outcome of the rationalization to the coordinating team. The other utmost role that is played by the AO task team is to ensure the establishment of the school task team which will be directly involved with the rationalization of the school.

The school task team is composed of the principal, the School Management Team (SMT), the chairperson and secretary of the School Governing Body (SGB). When one looks into the composition of both the AO task team and the school task team, one can see that the department tried its utmost to include all the necessary stakeholders. The role of the school task team is to identify the affected grades (that is the number of



learners affected). As it is school based, the school task team has to develop a database of information that is relevant to the whole process of rationalization e.g. the assets and textbooks of the school. Parents and learners that are directly or indirectly affected by rationalization have to be taken on-board on everything that is happening in the school; it is therefore the responsibility of the school task team to initiate consultation with all local stakeholders and has to keep records and report challenges and progress to the AO steering committee. Rationalization of schools is expected to be approached as a provincial project with various phases and has to be concluded within a specified timeframe. As the first step, the district offices have to identify eligible schools. It was the intention of the department to, as a phase one, rationalize all schools that had no financial implications and formalise all outstanding mergers in 2013. The rationalization of schools with financial implications (2013-2016) and the last phase was to be the mopping up that has to happen in 2017.

## **Advancing rationalization**

In line with departmental directives, rationalization of schools has to be approached as a provincial project with different milestones and to be concluded within a specific timeframe. In the first phase districts has to detail plans on how they will effect rationalization. It has to be stated that the department has categorised two: those that have financial implications and those that do not have financial implications. Things such as proximity of affected schools that had no additional learner transport or no new routes have to be looked into. It is during this stage that it has to be seen if there is sufficient space in the receiving and or retaining schools and this will include middle schools that will be upgraded but with no additional infrastructure.

The buzz word in rationalization of schools is consultation. The department has emphasised that all stakeholders were to be taken on board. There has to be consultation with educators at schools earmarked for mergers and closures since this was seen to be able help the smooth implementation of rationalization. The consultation process has to be extended to parents, non-governmental organisations (NGOs), traditional leaders, broader communities, farm owners/unions (where applicable) educator unions, SMTs, social partners, local government, school governing bodies, RCL and principals. The directive given by the department was that educator unions had to be engaged in the various bargaining councils. The department also gave directive that information has to be disseminated on a continuous basis between land owners, traditional authorities and the district. The dissemination of information could be done by using periodic newsletters or even during the community meetings. It is the responsibility of the task team to develop an advocacy. According to the departmental guidelines, schools that are operating in the same premises for operational reasons and are not already in the process of merging before the issuing of Departmental Circular 50 of 2011 should be processed in 2012/13. There has to be no school mergers for the purpose of more effective and efficient resourcing until rationalization is completed. The directive also indicated that should any mergers be regarded as urgent by the District Chief Directors, submissions have to be made to the Provincial Steering Committee on Rationalization. Rationalization has to be granted according to normal procedures and criteria, but should it imply that a high school or a primary school will be formed in the process; the Curriculum Directorate will then consult with the Provincial Steering Committee on Rationalisation.

## **Merging of schools**

Before the merging of two or more public schools according to Section 12A of the SASA, the Member of Executive Council (MEC) of education must give a written notice to the schools in question of the intentions to merge them. If the merging public schools are on a private property, the property owner has to be informed of the intended merger. The next step will then be to publish a notice inviting comments from the public and giving reasons for the proposed merger in one or more newspapers circulating in that area where the school in question is situated. The next step will then be that SGB and other interested parties of the school in question be given the opportunity to make representations within a period of not less than 90 days from the date of the notice stated at the top. The next step will be to consider representations received from the SGB and other interested persons. The possible appeals against the decision will be heard. This is done with the knowledge that Section 12A (7) of the SASA makes provision for the SGB of a public school to be merged to appeal to the minister against the decision to merge. The next step then is that there has to be an employee assistance programme of the province that must support educators moving from small rural or farm schools into larger merged schools. This support has to be extended to professional support by district offices regarding the management of large classroom sizes,

assessment approaches and other potential curriculum challenges. Educators are also expected to accommodate the different learning needs of learners that move from smaller schools into larger merged schools. It has to be indicated that merging of schools will result in situations where property will be left unutilised and as a result, those unutilised schools has to be deregistered according to Section 12A, 37 and 58 which dictates the management of assets, liabilities, rights and obligations of the schools that are merged, must, subjected to the conditions of any donations, bequest or trust contemplated in section 37 (4), vest in the single school. Section 37 (4) states that money or other goods donated or bequeathed to or received in trust by a public school must be applied in accordance with the conditions of such donations, bequest or trust. Section 58A (2) indicates that no person may dispose of any assets owned by a public school to another person or body without the written approval of the notice in the Provincial Gazette.

There are however anticipated challenges in the process or rationalization. The department is in cognisance of the fact that there are two or more schools operating on the same building without a certificate of merger. The challenge about the merger is that schools that have been closed and merged and deregistration certificates were not issued. It is up to the AO and districts to identify schools that were already in the process of merger submit the list to IPDS for the purpose of finalizing the process.

## **IMPLEMENTATION OF RATIONALIZATION**

### **Phase 1: rationalization of schools without financial implications (2013)**

The rationalization which results in the closure of some schools, section 33 of SASA has to be followed (Department of Education, 1996). According to section 33, the SGB and the broader school community will be informed of the intention to close the school and the reasons thereof. This has to be done between August and September 2012. In these very months, the SGB and the broader school community will be granted an opportunity to make representations to the MEC. The MEC then has to consider the representation received from the SGB or the community representatives (Dieltsiens, 2005). The next step will be to ensure that the now unutilised school is deregistered, this step will be informed by section 12A, 37 and 58 which provides procedures regarding the management of all assets and liabilities devolve on the state while section 12A (5) states that all assets, liabilities rights and obligations of the schools that are merged, must subject to the conditions of any donation, bequest or trust contemplated in section 37 (4), devolve on the state unless otherwise agreed between the MEC and the SGB of the school (Department of Education, 2000). Section 37 (4) indicates that the money or other goods donated or bequeathed to, or received in trust by any public school must be applied in accordance with the conditions of such donations, bequest or trust. One most important clause is the (58A) which states that no person may dispose of any assets owned by a public school to another person or body without the written approval of the MEC of education.

## **METHOD**

### **Participants**

The targeted population comprised of teachers, principals and school governing body (SGB) members and learners of one Area Office (AO) from Ngaka Modiri Molema district in the North West province. The district is made up of five, Area Offices (sub-districts) namely, Kgetleng, Ditsobotla, Mahikeng, Rekopantswe, Ramotshere Moiloa and has 416 schools including primary, middle and high schools (Department of Basic Education, 2011). This means that there were 416 principals, about 6 247 teachers and approximately 1750 SGB members and 188 489 learners. This district has 50 middle schools. Since the topic is on rationalization, the study has focused only on some schools that are affected by rationalizations. Participants in this study are from a common village and from four schools. The schools are two primary schools with an enrolment of about 300 learners each and twenty educators. There is also a middle school of about 350 learners and 15 educators fed by both primary schools mentioned above. The last is a high school with about 200 learners and 11 educators. The population for this study was drawn from these schools. Five SGB members were randomly chosen from each school totaling the number of SGBs to 20. Five educators from every school were also randomly selected giving a total number of 20 educators. The same number of learners was used from all the schools that is five learners

from a school, giving a total of 20 learners. It has to be mentioned that in the primary schools, only grade 6 learners were asked to participate. The last four people in the population were principals of the four schools as they are at school on behalf of the department (Brijraj, 2004). Participation by all individuals was voluntary because the purpose of the study was clearly explained to all possible participants. All questions and queries were addressed to their satisfaction. Examples of questions posed by the participants were (a) "... is the AO going to know my views on rationalization?" (b) "...won't I be victimized if I am saying something opposed to the department?" and so on. Following this process, it was indicated to the participants that if they so wished they could decline to participate. Those who consented to participate were given consent forms to fill in.

## Instrument and procedure

In this study both qualitative and quantitative methods of collecting data were utilized. In essence this was a mixed methods study. It is averred that the goal "...of mixed methods research is not to replace either of these approaches but rather to draw from the strengths and minimize the weaknesses of both in single research studies ... " (Johnson, & Onwuegbuzie, 2004, pp. 14 - 15). In a similar vein, it has been pointed out that when the two methods are used in combination, the weakness of one could be balanced by the strength of the other (Breakwell & Millard, 1995). The aim of utilising both qualitative and quantitative methods here was to use these as some form of triangulating findings. This means that one method was used in some aspects of the study to verify and corroborate participants' assertions and views in the other method. A questionnaire comprising two sections was used to collect data. The first section requested the participants to provide biographical data in terms of age, gender, highest academic qualification and work experience. The second section determined the concerns and fears of stakeholders on the rationalization of schools in their village.

## RESULTS

### Biographical data

Participants were 64 teachers, principals, learners and school governing body members. Table 1 shows the biographical data that the participants were requested to provide. It may be observed from the table that the majority of participants were females. Participants' ages ranged between 12 years and 55 years. The table further reveals that the (41%) of the participants had completed either a diploma or a degree and higher. It is worth noticing that most of the teachers (20%) had teaching experience of 9 years or less. Where the teaching experience ranged between 5 years and 21 years ( $M = 11$  years;  $SD = 4.9$ ). With respect to SGB members, (25%) had work experience of 15 years or more where experience ranged between 5 years and 22 years.

**Table 1:** Biographical information of the participants (N = 64)

	Category	N	%
<i>Gender</i>	Male	26	40,6
	Female	38	59,37
<i>Age</i>	12 – 29	27	42
	30 – 39	29	45
	40 +	8	13
<i>Highest academic qualification</i>	Below grade 12	20	31
	Grade 12	18	28
	Diploma (e.g. Diploma in primary education)	21	33
	Degree or higher(e.g. B.A. or B.A. Honours)	5	8
<i>Position held in school</i>	Educator	20	31
	Principal	4	6
	Learner	20	31
	School governing body member	20	31

<i>Teaching experience (Teachers)</i>		
5 – 9	4	20
10 – 14	8	40
15 - +	8	40
<hr/>		
<i>Work experience (SGB Members)</i>		
5 – 9	7	35
10 – 14	9	45
15 - +	4	25
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## Deliberations on concerns and fears for the rationalization of schools

The researchers had five rating points for the scale namely, 5 = I don't know 4 = Strongly Agree, 3 = Agree, 2 = Disagree and 1 = Strongly Disagree. The researchers had divided the questions into five areas each with its heading. In doing this, the researchers thought that the questions were about (a) does the respondent have knowledge on rationalization of schools, (b) rationalization of schools will affect the quality of education, (c) rationalization will help in resourcing schools, (d) rationalization will be a burden to new schools that will accept the smaller schools, and (e) rationalisation of schools will benefit my community. These questions were seen to be the gist of this research since this research deals with fears, concerns and understanding of rationalisation of schools by stakeholders.

**Item 1:** Understanding of what rationalisation is all about. Majority of respondents 49 (76.56 %) were of the view that they did not understand what rationalisation is all about. They maintained that meetings that were held were very short and they didn't get ample time to raise their concern. One even stated that “...it is like they were here to tell us what they were going to do with our schools without giving us chance to ask questions”.

**Item 2:** Expected effects of rationalisation to the quality of education. Most of the respondents 60 (93, 75 %) were of the view that rationalisation was going to affect the quality of education received by the learners. They maintained that the merging of schools was going to lead to a situation whereby good educators were to be taken by one school. There was a fear that good educators who were in the middle school were going to be sent to high schools and since they did not know the high school syllabus, there was going to be poor education for the learners. There were comments like “...which primary school is going to get Mrs Khuse since she is good in mathematics...this will be a loss to the school that does not get her”. This percentage is seen to be too high. One may deduce that only principals who make 6.25% of respondents knew that the impact of rationalisation was not going to be too big since plans were put in place to balance and benefit all the schools. This in a way support the responses to item 1 which is the fact that participants did not have knowledge on what rationalisation of schools entails.

**Figure 1** shows that 75% of respondents are agreeing that rationalisation of schools will affect the quality of education. This gives a vivid picture that rationalisation of schools is viewed as something that will bring about a low quality of education since respondents are of the view that good educators will be lost to other schools.

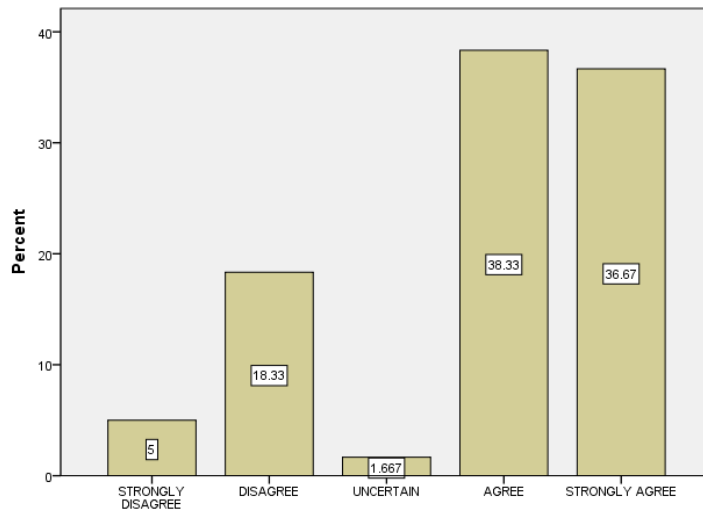
**Item 3:** Rationalisation will help in resourcing schools. Majority of respondents 33 (51.56) were of the opinion that schools were to benefit materially from the merging of schools. They indicated that the property from the school that was going to close was to be shared equally amongst other schools and this meant that schools will benefit.

**Item 4:** What will happen to the school that was to close? Majority of respondents 54 (84 %) of respondents are very much concerned about what will happen to the buildings of the school that is to be closed. This concern is fortified by the fact that not so long ago was the school renovated. Respondents are of the view that closing this school shows how the department is unable to plan

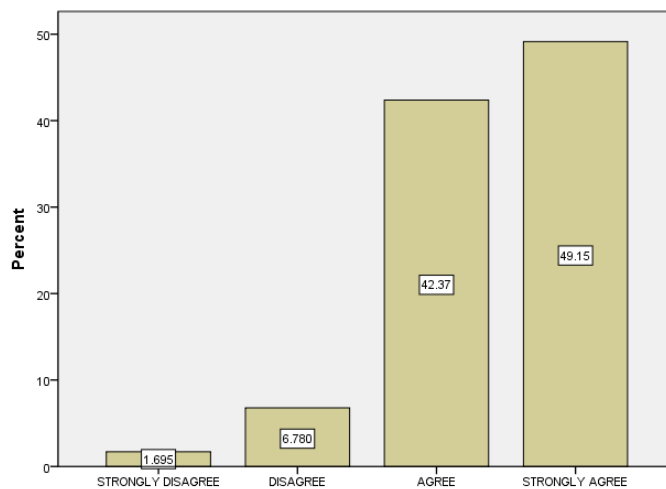
Respondents in figure 2 gives a picture that most respondents believe that rationalisation of schools will burden the new accepting school. This has to be looked into against response that, the receiving school will be more

resources due to resources shared from the closing school. Those who disagree to receiving schools being burdened are principals and very few educators. This highlights the point that most of the respondents are having less knowledge on rationalisation.

**Figure 1: rationalization of schools will affect the quality of education,**



**Figure 2 Percentage distributions of participants on an item about rationalization will be a burden to new schools that will accept the smaller schools**



## DISCUSSION

The results presented here have shown that the participants were relatively mature individuals most of whom (57.81%) were 30 years or older. It is however interesting to note that 59.37% of respondents do grade 12 and less. This is important in this study since the research was about the fears and concerns of stake holders'. It is important to note that learners as stakeholders in this whole rationalisation has fears and concerns that needs to be addressed, it is also interesting to notice that the SGB parent component are mostly having a long service serving on the body. The interviewees were asked, "Do you have knowledge on rationalization of schools?" In the first argument the interviewees indicated that they did not know exactly what rationalisation was all about. They indicated that they have heard rumours that schools are going to merge. They indicated that they knew that the middle school was going to close and reasons brought forward were not clear. The second argument

endorsing that stakeholders had no knowledge about rationalisation was based on the fact that rationalization of schools was not disseminated to all stakeholders in our community. Excerpts from the interviews illustrate this. For example Respondent 21 answered the question by stating: “...*I never miss tribal council meeting...nobody ever told us that our middle school will close*”. Respondent 21 supported Respondent 37 sentiments by stating that: “...*there have been rumours on the closing of our middle school...only those close to the chief have knowledge of the closing of the school*”. Similarly Respondent 47 stated “...*why didn't the common practice that we are used to not followed...there could have been community meetings that could have given us common understanding of what is going to happen*”.

On the issue of the quality of education the interviewees were asked “Will rationalization of schools affect the quality of education?” Here a mixture of responses was received. Interviewees indicated that the quality of education was going to be affected. Other indicated that due to acquisition of resources from the closed school, the quality of education was going to be better. On the other hand some interviewees were of the opinion that good educators were to be lost. Their argument was that educators from the middle school to be closed where were they going to be stations. This they maintained stating that to which school the best educators were going to be sent. If sent to the high school, it will mean that the primary school was neglected. On the question on is rationalisation aimed at benefitting our school “Rationalization is meant to improve our education system” here responses gave the impression that interviewees believed in the education department. They said that the department can't come up with something that will make the department to have problems. To them, there were no concrete reasons that they could bring forward but just the belief that the department can't steer them wrong. On the question of “School property will be safe when schools merge” responses to this question were that yes school property will be safe. Respondent 23 stated that “...it is in the interest of schools to look after the new acquired property”. To contextualise her answer, Respondent 15 talked about poverty around the school. In this regard she mentioned how wasteful the department has been in that buildings of the middle school were to be vandalised once there was no schooling taking place. She then intimated, “...*we are tax payers; it is our money that get misused*”. One other comment that showed that interviewees were in the dark in some aspects of rationalisation was their unhappiness about what was going to happen to the principal of the middle school which is supposed to be closed. Their worry was that he was going to be left in the ledge when his school closed; Respondent 18 indicated that “...*as a family man how is his family going to survive?*” Interesting about the posts that educators and principal occupy, there was again a problem from interviewees. When responding to the question “Educators will not lose their jobs due to rationalization?”, the common response was that educators will lose their jobs. This shows that these stake holders were not informed about rationalisation. The only concern that came from educators was that the pending promotional posts were terminated until rationalisation was completed. So, those who hoped to fill in the vacant posts were disappointed. This study in a way has inherently illustrated how stakeholders are in the dark pertaining to rationalisation of schools. One may take for granted that stakeholders know, but this study has exposed the fact that very few people know what rationalisation entails. The information supplied at theoretical frame work was not cascaded to all stake holders. One may hasten to say that the intentions of rationalisation are good for education in South Africa but the most unfortunate thing is that stakeholders are not aware. It therefor indicates the importance of this study. From it one can deduce that there has been silence from the department of education. Lack of communication at times leads to uninformed decisions that respondents can take and resist the change that is about to happen. This study shows that principals had information on rationalisation but it seems that the information was not cascaded to other stake holders. The researchers therefore are of the view that the guidelines recommended from this study will be invaluable to (a) education authorities, (b) circuit managers in particular and (c) principals who have a responsibility and duty to inform other stake holders in parents meeting and in meetings with learners. In this study it was made clear that some departments fail to keep in touch with stakeholders. It is therefore recommended that the departmental officials like the circuit managers should make it their job to make follow-ups on schools. When visiting schools, circuit managers should demand parents meeting minutes, this will be evidence that principals cascades information to all stakeholders. The department should at least use media to inform stake holders about their intentions. Radios, local newspapers and TV can be utilised to inform stake holders. The results of this study notwithstanding, some suggestions for further research are provided. This study was conducted in one district in the schools in Kgetleng River AO. It would be interesting to determine whether similar findings would be established in other AOs or in other provinces. Such findings will be important in endorsing what has been reported here and helping in building the knowledge base in this area. It would be useful to determine whether similar findings as reported here for reliability and validity, would be attained in other contexts. According to section 33, the SGB and the broader school community will be informed of the

intention to close the school and the reasons thereof. From what respondents said, this section was not done hence we maintain that communication with stakeholders was flawed.

## LIMITATIONS

It has to be stated that even if the sample of this study was randomly selected, the results presented here are in no way meant to be generalised to all schools in the North West province for instance. This is said since we are mindful of the fact that schools may be in the same province but conditions in those schools cannot be the same. It is worth pointing out that rationalisation of schools is a new thing in our education system and as such there will be challenges when it is implemented hence this paper may not be seen as comprehensive in any way. Because of this, the researchers' aim was to illustrate how stake holders feel about rationalisation, if they have knowledge of it. This research we think shed light to rationalisation.

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# **HOMEWORK IN PRIMARY SCHOOLS: IS IT SERVING THE PURPOSE?**

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## **ABSTRACT**

*In this paper we describe the views of parents and educators of a primary school in a village in Kgetleng River Area office on homework as a means of improving the learner/child's chances of achieving in school work. Homework serves various educational needs. Participants were 150 educators and parents of learners with ages ranging between 21 years and 55 years. The results revealed that participants did not see homework as being a tool that encourages effective learning and teaching. Respondents indicated that most of the parents living with learners were not educated and did not understand why educators want them to do the work on their behalf. It is recommended that schools should educate parents on the importance of their involvement in the children's education and how important homework is.*

**Keywords:** Homework, parents, learners and Primary schools

## **INTRODUCTION**

Homework has been a part of the learners' life from the beginning of formal school. However, the practice has sometimes been accepted and other times rejected, both by educators and parents. The school is seen as a place where learning takes place especially a primary school where learners meet educators for the first time in their lives. It is at the school that learners are exposed to formal education. The child is then taught by educators on an assortment of things (Cauley & McMillan, 2009). The common practice is that learners are at school for five to seven hours depending on the school policy. This is the time devoted to teaching and learning. It is at the school that the learners get to learn learning areas like Maths and Social sciences etc. educators encourage learners to do school work. It is important to indicate that learners are sent to school to be educated since education supports learners with an insight to look at their lives and learn from every experience. After the teaching in the school, educators need to know as to whether the learner has understood that which he was taught. The educator then gives the learner work to do at home independently. This is the homework. One may say that homework refers to tasks assigned to learners by their educators to be completed outside the classroom, preferably at home (Kohn, 2006). Homework assignments may include among others, a quantity or period of reading to be performed, writing or typing to be completed, problems to be solved, a school project to be built or other skills to be practiced. It is however important to note that the basic objective of assigning homework to learners is to increase their knowledge and improve the abilities and skills of learners. Literature is replete with definitions of what homework is defined as out-of-class tasks assigned to students as an extension or elaboration of classroom work. There are three types of homework: practice, preparation, and extension Doyle & Barber (1990). On the other hand Murphy and Decker (1990) have argued that homework, or homework assignment, refers to tasks assigned to students by their teachers to be completed outside of class. Common homework assignments may include a quantity or period of reading to be performed, writing or typing to be completed, problems to be solved, a school project to be built (such as display), or other skills to be practiced. It is however very important to note that the basic objective of assigning homework to learners is to increase their knowledge and improve the abilities and skills of learners.



## **Theoretical framework on the importance of homework**

Homework has been part of the learners' school life from the beginning of formal schooling. It is seen as important because it is the intersection between the school and the learners' home. It is argued that homework serves as window through which one can observe one's child's education and express positive attitudes towards one's child and his education Murphy and Decker (1990). For the school, homework is a cost effective way to provide additional instruction in practice. Homework can improve the child's achievement if it is well coordinated and reported on. If the homework is done well, the learners' general knowledge and results will improve. Wallis (2006) maintains that the learners' mastery of basic academic skills such as writing, reading and maths will improve. It is reasoned that if the child is able to take the work from back the school to his home, do the work and after that take the finished work back to school, this will strengthen his sense of responsibility. Among many reasons that are put forward for learners to do homework is to take them away from the streets.

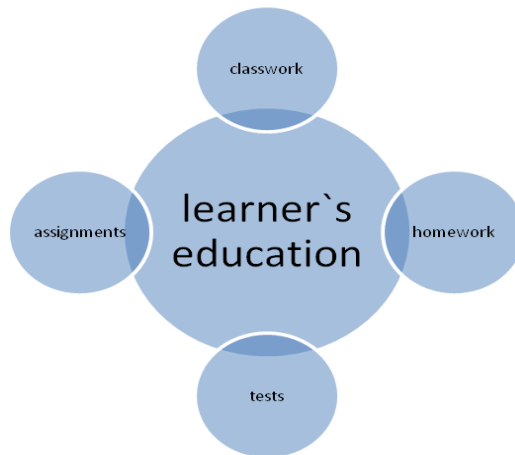
After school learners have to do their homework and these helps parents with supervising their children after school. Cooper (2007) maintains that homework is given to learners to test their understanding of work that they have done in class. Since the expectation is that learners do the work on their own, this instils in a learner independence and responsibility. It encourages self-activity and also guides learners towards being able to do a task independently. Kralovec and Buell (2000) are of the opinion that homework provides a control mechanism for the educator to determine which learner need attention and help. It helps and teaches learners to be conscientious at all times and to promote neatness. Homework on the other hand gets the learner ready with crucial skills, that they may need in future, e.g. exposure to reading up and research. It also encourages learners to act proactively regarding class work. (BBC News. 1998) further states that homework also helps to create space for tasks that are impracticable in class to be done at home, for example in social sciences whereby learners should collect information from oral sources on what has happened in the past in their village. As it is known, parents sent their children to school and they (parents) stay at home or go to work Buell (2004). They do not actually know what their children learn; the homework offers schools an opportunity to let parents know what their children are learning. Thus, homework can play a public relations role by keeping parents informed about class activities and policies. It is important to note that homework can also fulfil an administrative role in helping schools to achieve their overall mission of improving learners' achievement Bennet and Kalish (2006). One may also look into homework as a bridge that joins the school and the home (parents). Parents are expected to take an interest in their child's homework, give help and guidance where necessary. Parents should ensure that the homework is completed on time, signed and returned to school on the correct day. Parents are responsible for providing a suitable place and time and the necessary equipment to ensure the successful completion of the homework task. They also help in encouraging them to set aside a regular daily session to read and complete homework. Supporting reading development by listening to their child read, reading to their children and discussing texts with their children.

From the schools' perspective, there is an opportunity to monitor learners' independent progress and for parents there is a potential to gain a greater appreciation of education and to express positive attitudes towards their children's achievement. The common view is that homework is an essential part of the learners education and can serve not only to enhance the child's achievement but if well used and maintained, it can enhance family relationships whereby parents will guide learners and since learners believe in what their parents say, this will make relations strong. It serves as an intellectual discipline, establishes study habits, and eases time constraints on the amount of curricular material that can be covered in class, and supplements and reinforces work done in school. In addition, it fosters student initiative, independence, and responsibility and brings home and school closer together.

Homework helps in improving the learner's thinking and memory, it also helps the learner to develop positive study skills and habits that will serve him throughout his life. It also teaches the child to use time wisely. The child has to know that after school before going to play the first important thing is the homework. It teaches the learner to take responsibility for his work, it also allows the learner to review and practice what was done in class and helps the learner to get ready for the following day's class (Lemmer and van Wyk, 2004). Homework helps learners to use research such as libraries, reference materials and computer web sites to find information. It encourages learners to explore learning areas more fully than classroom time permits. Homework allows learners

to extend learning by applying skills to new situations and helps learners to integrate learning by applying skills to a single task, such as book reports or science projects. Homework on the other hand helps parents to learn more about what their children are learning in school and allows parents to communicate about what the child is learning, this then encourages parents to inspire the children's enthusiasm.

**Figure 1 Important undertakings in the learner's education**



Timing in homework is very important. According to some researchers, two ways to increase learners' opportunities to learn are to increase the amount of time that learners have to learn and to expand the amount of content they receive. Homework may foster both these goals. In the South African context, homework is also seen as a means through which the learner can use to be home and minimise idling in the streets. Reforms in education have called for increased homework, and as a result, reports show that students are completing considerably more homework than they did a decade ago. According to statements by the National PTA and the National Education Association (NEA), the following amounts of homework are recommended: (1) From grade R to third grade, no more than 20 minutes per day and; (2) From fourth to sixth grade, 20 to 40 minutes per day Doyle and Barber (1990). Homework set prior to a lesson may aid the understanding later in the class. It also provides opportunities for reinforcement of work learned during the school time and for learners to develop their research skills. Learners will need to seek information for themselves from reference materials such as books and encyclopaedia and by so doing they are helped along the path of becoming independent learners. It is also important for one to note that when given homework, learners are given deadlines for submission of their work to the educator. These deadlines helps in promoting self-discipline and this will help the learner even beyond his schooling days. There are three types of homework. They are; practice, preparation and extension. Practice homework reinforces lowly acquired skills e.g. a learner who has just learned a new method of solving mathematical problem. That learner should be given sample problems to complete on their own. Preparation homework helps learners to get ready for activities that will occur in the classroom. Learners may for example be required to do background research on a topic to be discussed later in class. Extension homework is frequently long-term continuing projects that parallel classwork. Learners must apply previous learning to complete this homework, which may include science fair projects and term papers.

One of the main goals of my homework assignments is to create opportunities for my learners to interact with their parents and take time to learn about what makes themselves and their families special. It has to be stated that the learners' homework will always have an impact on the learners' home life. This stated, parents will in one way on the other feel the impact of homework. There are views on how parents would be involved in their children's homework. Amongst others, parents can share any of their concerns regarding the amount or type of homework assigned to one's child with the child's educator or principal. Parents may encourage their children to take notes concerning homework in case questions arise later at home. It is the responsibility of parents to provide a suitable study area and necessary tools like study table, paper and books which the learner use to complete the homework assignments. Parents should also minimise household chores for learners to afford them time to do their homework. Learners are in most instances attached to some television programmes and as such they might neglect their homework or do bad qualities work. It is therefore the responsibility of the

parent to monitor television viewing and establish a specific homework timetable. Parents should plan homework schedule with their children and on it allow free time when homework is done. Extrinsic motivation goes a long way, to achieve this, parents should praise their children's efforts (Plato, 2000). Parents should know how to help learners, the homework is meant for the learner, as such learners should do the work, and parents should only guide and not do the work for the child. It is a known fact that younger learners need parental assistance. Parents should guide learners and give them chance to explore for themselves. Parents should check their children's homework books. It is in the interest of the parent to ask for homework policy and specific assignments from the learner's educator. Younger children need more parental assistance with homework than older children as a result (Van Wyk, 2001). Parents have to go over homework with their children. Parents have to do several problems or questions together with their children, and then observe them doing the next one or two. If the child is in the primary school, parents have to check completed assignments. At all levels, parents should ask to look at homework once it has been marked and returned. This will help both parties to discuss the school work done at home. The parent has to ask the child's teachers about their homework policy and specific assignments (Eita, 2007).

## South African context and basis of the study

The 1996 Constitution requires education to be transformed and democratised in accordance with the values of human dignity, equality, human rights and freedom, non-racism and non-sexism, and guarantees the right to basic education for all, including adult basic education (Department of Education, 2000). To achieve this, schools have to devise means to give learners good education. It will not be possible for the schools to achieve this in the contact time stipulated by the South African Schools Act. The Preamble to the South African Schools Act, which became law in November 1996, explains its rationale as follows:

*...this country requires a new national system for schools which will redress past injustices in educational provision, provide an education of progressively high quality for all learners and in so doing lay a strong foundation for the development of all our people's talents and capabilities, advance the democratic transformation of society, combat racism and sexism and all other forms of unfair discrimination and intolerance, contribute to the eradication of poverty and the economic well-being of society, protect and advance our diverse cultures and languages, uphold the rights of all learners, parents and educators, and promote their acceptance of responsibility for the organisation, governance and funding of schools in partnership with the State; ... (Republic of South Africa, 1996c).*

It is therefore important to have homework as a way of giving learners enough education work. The work they can't do at school will then be given to learners as homework. Homework has to be seen as an extension of schoolwork, not as an additional piece of work (Felix, 2008). In supporting the learner's homework, parents and carers are supporting their learning as well as raising their achievement. Education reform has been a priority in South Africa since the establishment of the Government of National Unity in 1994 and has played a key role in redressing the injustices of Apartheid. Impressive progress has been made in education legislation, policy development, curriculum reform and the implementation of new ways of delivering education, but many challenges remain in many areas, such as student outcomes and labour market relevance. Education in South Africa can be broken down into the following sectors/bands: early childhood development (ECD); general education and training (GET), consisting of: (1) grade R to grades 1 to 3 (the Foundation Phase); (2) grades 4 to 6 (the Intermediate Phase); (3) grades 7 to 9 (the Senior Phase); (4) further education and training (FET), including grades 10 to 12; (5) adult basic education and training (ABET); (6) special needs education (SNE); (7) higher education (HE). Schooling is compulsory for all children from the year in which they turn 7 to the end of the year in which they turn 15 (or the end of grade 9, whichever comes first). This study however focuses on educators and parents of learners in primary school that is from grade R to grade 6. Homework is part of our overall schools policy (Department of Education, 2013). It encompasses a variety of activities which learners are asked to do outside lesson time, either individually or with parents or carers. It is designed to act as a meaningful and worthwhile experience for the learners.

## METHOD

### Participants

The targeted population comprised of parents and educators of a primary schools in a village in Kgetleng River Area Office (AO) of the North West province. The OA has three clusters named: Elands, Madikwe and Silverkrans. The total number of learners in these schools is 24 301. The AO has 26 primary schools with the total number of learners being 14300. The reason for having parents and educators as participants is that they are the ones responsible for seeing to it that learners do their homework. Their inputs are seen to be more relevant and informed than views of other stakeholders since they are the ones who are physically involved in the undertaking of the homework. It is worth mentioning that educators serve two purposes. In this study they are seen as educators in class and as parents since they do have children of their own. Participation by all individuals was voluntary because the purpose of the study was clearly explained to all possible participants. All questions and queries were addressed to their satisfaction. Examples of questions asked included (a) “... will you put my name in your report?” (b) “... Will you report what I say to the department of education?” and so on. Following this process, it was indicated to the participants that if they so wished they could decline to participate. Those who consented to participate were then requested to sign a consent form.

### Instrument and procedure

A questionnaire comprising two sections was used to collect data. The first section requested the participants to provide biographical data in terms of age, gender, highest academic qualification and work experience. The second section determined the views of both parents and educators on homework as a means of improving the learner/child's chances of achieving in school work. For example, participants were given definitions on homework and what it entails. The definitions were obtained from homework literature (e.g. Murphy and Decker, 1990). Who defined homework as: “... out-of-class tasks assigned to students as an extension or elaboration of classroom work”. The researchers were able to identify that majority of respondents were not well versed and as such it was decided that interviews should also be used for them to be able to express their views. As a result interviews were used to corroborate information in questionnaires. Questions asked were asked in such a way that parents were at ease and could understand them easily.

## RESULTS

### Biographical data

Participants were 30 educators and 120 parents. Table 1 shows the biographical data that the participants were requested to provide. It may be observed from the table that the majority of participants were women. Participants' ages ranged between 21 years and 55 years. The table further reveals that the majority (78%) of the participants have grade 12 or fewer qualifications. It is worth noticing that most of the teachers (86.67) had teaching experience of 10 years or more. It is also important to note that 26 (86.67%) of educators are having an experience exceeding ten years.

**Table 1 Biographical information of the participants (N = 150)**

Category	N	%
<i>Gender</i>		
Women	89	59.33
Men	61	40.67
<i>Age</i>		
20 – 29	27	18
30 – 39	78	52
40 +	45	30
<i>Highest academic qualification</i>		
Grade 12 or less	117	78

Diploma (e.g. Diploma in primary education)	15	10
Degree or higher(e.g. B.A. or B.A. Honours)	18	12
<i>Position held in school</i>		
Educator	30	20
Parent	120	80
<i>Teaching experience (Teachers)</i>		
5 – 9	4	13.33
10 – 14	12	40
15 - +	14	46.67

## Reflections on homework

Participants were requested to indicate whether they agreed with statements on homework. Table 2 shows the frequency distribution and percentages of the participants in terms of their reflections on homework and its importance. It is interesting to note that 30 educators (100%) were of the opinion that they understood the value of homework. The same can't be said about parents since 90 (75%) of them were of the opinion that they did not understand the value of homework. It is important to also notice that all educator respondents are of the opinion that they always understand the homework instructions. On the other hand 82 parents (68.33%) stated that they did not understand the instructions of the homework. Majority of parents (82.50%) also indicated that it is not their responsibility to help learners with homework. This, one may attribute to the fact that majority of parents are not learned.

**Table 2 Frequency distribution and percentages in terms of reflections on homework and its importance**

HOMework	Yes/No N (%)	Educator	Parents
1. I understand the value of homework	Yes No	30 (100) 0 (0.0)	30 (25) 90 (75)
2. homework is important for my child to learn	Yes No	30 (100) 0 (0.0)	73 (60.83) 47 (39.17)
3. I always understand the instructions	Yes No	30 (100) 0 (0.0)	38 (31.67) 82 (68.33)
4. I help my children with homework	Yes No	28 (93.33) 2 (6.67)	39 (32.50) 81 (67.50)
5. It is my duty to help my child with homework	Yes No	30 (100) 0 (0.0)	21 (17.50) 99 (82.50)
6. My children's performance has improved due to homework	Yes No	30 (100) 0 (0.0)	60 (50) 60 (50)
7. Homework help to keep children off the streets	Yes No	28 (93.33) 2 (6.67)	90 (75) 30 (25)
8. Homework is a burden to parents	Yes No	25 (83.33) 5 (16.67)	105 (87.50) 15 (12.50)
9. There is no need for homework	Yes No	0 (0.0) 30 (100)	38 (31.67) 82 (68.33)
10. Homework is good for learners	Yes No	30 (100) 0 (0.0)	30 (25) 80 (75)

The table also reveal what parents perceive as being important for homework is the fact that it keeps the children off the streets. This is seen in the fact that 90 parents (75%) believes that homework is important for taking the learners off the streets. When one looks at responses on item 1 where 90 parents (75%) are of the view that they do not understand the value of homework one is not amazed with responses on item 8 where 105 parents (87.50) are of the opinion that homework is a burden to parents. The 16.67% of educators that is 5 educators who share the parents' view that homework is a burden to parents are stating that most of the parents

are semi-literate and as a result homework is seen as a punishment to them. To corroborate the “Yes” and “No” responses interviews were utilised to get the exact views of respondents. It was during these interviews that a clear picture was painted on whether parents are knowledgeable about the importance of homework or not. During interviews, educators indicated that the learners who were able to submit their homework, the work was not done by learners. They stated that the work was done by parents. This was seen in the quality of the responses and the hand writing. Asked about the frequency of homework parent indicated that there seem to be no planning in school. One parent stated that “...*how can a grade four learner be given six different subjects as homework, how will it be possible for my son to complete all this work in one night?*” that in itself indicate that the educators at school do not have a timetable for giving learners homework hence six subjects to be submitted in one day.

## DISCUSSION

The results indicated that majority of respondents were women and ages of respondents indicates that 125 (83, 3%) of respondents were aged more than 30 years. This indicates that the respondents were fairly mature. It is however interesting to note that 117 (78%) of respondents have grade 12 or less qualifications. This means that the majority of respondents are not well educated. The reason for this is the fact that most of the parent respondents are actually grandparents and not biological parents. Parents of the learners are in most instances not staying with their children. The reason for this is that they are working in towns and due to distance from towns they stay in town and come back home over weekends and month ends. It has to be stated that Kgetleng AO is one of the deep rural AO s in the North West province. Looking into the responses by parents, one is dazed to learn that 90 (75%) of parents do not understand the value of homework. This, one should understand since it is the direct result of education levels of the parents. Looking into the responses one get grips into the way respondents view homework. One respondent responding to the question: what do you understand by homework responded by stating that “...*educators shift their responsibility to us by expecting us to do their work*”. This statement was supported by another response from a parent who pointed out that “...*we sent the children to school so that educators should teach them, but teachers sent them back and expect us to teach them*”. Interviews painted a better picture because parents were able to express their views on what they felt about homework. Most parents indicated that they were not educated and as such they were unable to help learners’ with homework. They felt that since they were not learned homework was a burden to them. Some even indicated that educators were unfair in giving learners homework that was supposed to be supported by resources like newspapers. This was stated because parents indicated that in rural areas newspapers are not sold and as a result parents have to go house to house asking for old newspapers, this was seen as a serious inconvenience. One parent asked a question that “...*how can you expect a blind person to lead another blind person in the area that they both do not know*”?

It is also interesting to note the responses from educators. Educators are aware of the importance of homework. They indicated that learners may not always view homework as a pleasant experience, but if the assignment serves a good purpose and parents reinforce the completion of the tasks, students will benefit by gaining higher grades, better study habits, and a more positive attitude toward school and learning (Eita, 2007). The parents however indicated that it is not going to be possible for them to give learners homework that is not done. They indicated that the education of the learners was like a three-legged footrest, if one leg falls, then the whole footrest falls, that is, if the parent component is not doing their part; chances are that the learner will not be in a position to achieve (Plato, 2000). Educators indicated that most of the learners do not submit their homework. Reasons put forward is “...*I forgot it at home*” but if the educator searches the learners’ school bag they usually find the book in but without the expected homework. In responding to questions on the understanding of instructions, parents indicated that it was impossible for them to understand the instructions since they were unable to read especially English which is not their home language. Responding to the question “...*how then does your child do the homework without your assistance?*” the response to this question was that parents encouraged their children to go to houses in the neighbourhood to ask for help from learners who are at high schools.

After looking into what opinions parents and educators have on homework, the following can be seen as recommendations: the first step will be for the school to have a policy on homework. To see to it that it is functional, the principal and the School Management Team (SMT) should take parents on board during parents

meeting and explain to them exactly what is expected of them. A once off kind of meeting won't enable the school to attain their goals with homework; therefore there should be regular contact between parents and educators to determine the degree to which the parents should be involved in helping with homework. The SMT should encourage parents to make resources for homework available to their children. Parents should also be told to avoid doing homework for their children but only to guide them. In general parents should be encouraged to participate and help their children in doing homework. Parents have to keep records of days when homework is expected to be submitted. To make sure that parents are involved in helping their children, every parent should sign his or her child's homework book regularly in order to stay abreast on the child's progress and performance. Parents are expected to show a keen interest in their child's homework and also to carry the responsibility for the completion of the homework. Since most of the parents who responded indicated that they were semi-literate, it is advisable for family members to help with homework, this might be uncles, elder brothers, aunts' etc.

The homework policy must include amongst others measures to be taken against the learner for failure to do homework. This has to be indicated that failure to do homework is regarded as an offence and those who do their homework regularly could be rewarded. The policy should not be too firm, exceptions in special cases such as sickness, death and other unforeseen circumstances should be taken into account. Educators should make time to mark homework. To be able to keep track on who does the homework and who doesn't, records should be kept. To make homework interesting, they should vary with a view of sharpening different skills, for example; summaries, practical tasks, research and library. In the case that parents are not doing their part; the school should take it up with them. Letters have to be written to them and they should come to school to account. Schools should draw timetables and agree upon them so that there will be no clashes and learners will not be over loaded with homework. Lack of an established homework policy may place either insufficient or unrealistic demands on the child. Learners may not be expected to work to capacity; alternatively, they may receive too many assignments from different teachers on the same evening. Schools with homework policies tend to set guidelines for teachers to correct, grade, and return homework systematically to their students, thus reinforcing learning.

## **LIMITATIONS**

While the sample of this study was randomly selected the results presented here are in no way meant to be generalised to all schools in the North West province for instance. It is worth pointing out that homework in schools and primary school in particular is a vast field of study on its own hence this paper may not be seen as comprehensive in any way. Because of this, the researchers' aim was to illustrate that not all parents perceive homework as a means of improving the learner/child's chances of achieving in school work. This study in a way has inherently illustrated how education authorities may have been underestimating the understanding of the importance of homework. The researchers certainly feel that when schools embrace the guidelines recommended here, this will mean that the fundamental reason for conducting this study – to influence policy, will be achieved.

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# AN INVESTIGATION OF GENDER DIFFERENCES IN SHOPPING ORIENTATION: IMPLICATIONS FOR ONLINE RETAILING

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## ABSTRACT

*This paper investigates gender differences in shopping orientation among online customers. Data was collected using a structured questionnaire from a total of 201 online customers from Gauteng, South Africa. The findings show that in general women were more hedonic in their shopping orientation than they were utilitarian. Men were found to be more utilitarian in their shopping orientation than they were hedonic. When compared against each other, the results showed that men online shoppers were significantly more utilitarian in their shopping orientation than female shoppers. The results also show that there are no significant differences between men and women shoppers in their level of hedonic orientation. The findings have significant implications on the successful management of online stores and these have been highlighted in the paper.*

**Keywords:** Online customers, shopping orientation, hedonic shopping orientation, utilitarian shopping orientation, Gender

## INTRODUCTION

The internet is undoubtedly one of the most significant innovations of modern times. The ease with which it allows individuals and business to transact has resulted in growth of a whole new way of buying and selling products through what is known as e-tailing. South Africa is currently the biggest e-tailing market in Africa (Biz Community 2013). Many retailers in the country are opening up online stores. Researchers also note the growing number of individuals, men and women inclusive, taking up shopping using the online channel. According to Wilson (2013) the most active market segment in online shopping in South Africa in 2012 was found to be men aged between 35 and 44. The online shopping channel has clearly had significant impact on men resulting in many of them being more comfortable with shopping, an activity that is traditionally associated with women. With increased business interest in online retailing has come growing interest in studies aimed at investigating success factors in online retailing. Singh (2012) and Beneke et al (2010) pointed out the need for more research in the area of online retailing noting that business success largely depends on ability to understand factors that influence online customers behaviours. Such knowledge is important as it can help firms come up with well-informed strategies on how to appeal to customers in targeted market segments.

In light of developments relating to growing number of both males and females taking up online shopping, there is need for examining similarities and differences in their shopping orientations and understanding their implications on development of successful online retailing strategies. This paper aims at contributing to this understanding by examining gender differences in shopping orientations among online customers from Gauteng, South Africa. The specific objectives of the paper are (a) to examine female online shoppers' perceptions regarding their shopping orientation (b) to investigate male online shoppers' perceptions regarding their shopping orientation (3) to examine if there are significant differences between male and female shoppers in their shopping orientations and (4) to outline possible implications of the findings on online store retailing.

The paper has been structured such that presented in the next section is a review of literature on gender and shopping as well as different types of shopping orientations that customers often exhibit. This is followed by the methodology and presentation as well as discussion of findings respectively. The last sections discuss the managerial implications of the findings before concluding.

## LITERATURE REVIEW

Traditionally marketing research on consumer buyer behaviour viewed shopping as task that consumers engaged in to maximise utility in a rational manner by mainly focusing on the tangible attributes of goods and services (Holbrook and Hirschman 1982). In such cases the shopping goal is seen mostly in light of the actual purchase that they consumer makes. The customer is seen to engage in shopping behaviour with the purpose of acquiring a needed product. This viewpoint is very much in line with the widely accepted stages model of consumer decision making developed by Engel et al (1968). According to this model consumers go through distinct stages characterised by information processing in the buying process starting with problem recognition, information search, evaluation of alternatives, buying stage and post-buying stage. Irani and Hanzae (2011) noted that the traditional information processing model assumes that purchasing is a problem solving activity and that customers move logically through the different stages in order to solve the problem.

According to Kim (2006) efficiency and achievement are the main two dimensions associated with utilitarian shopping value. Achievement covers customers' concern to accomplish what they planned to achieve i.e getting the items they planned to buy. For example if a customer goes out to buy a dress for an outing, they want to come back with a dress that they will be happy with. Failure to get the product is likely to result into customer rating the shopping trip as unsuccessful and getting dissatisfied with the shopping experience. Efficiency on the other hand relates to effort spent in looking for what wants to buy. Babin et al (1994) noted that the utilitarian shopping value increases as the consumer spends less effort to get the needed product. The longer it takes for one to find the product they want the less will be the utilitarian value associated with that shopping trip. Customers who are interested in maximising utilitarian value want to spend the minimum time possible in a shop (Lloyd et al 2014). Such customers appreciate any assistance they can get from shop assistant to quickly get the product they want.

While traditionally marketing thinking was dominated by utilitarian value maximisation, in the 1980's researchers started to strongly argue for the need to appreciate the other values that customers derive from shopping especially those that are not task oriented as is the case with utilitarian value. Holbrook (1986) argued that it is wrong to assume that shopping trips are evaluated exclusively on the basis product acquisition as in doing so one fails to recognise and appreciate the many intangible an emotional benefits and costs that are also associated with shopping. The emotional benefits and costs associated with shopping are considered to constitute what is referred to hedonic value. According to Babin and Attaway (2000) two main dimensions summarise shopping values and these are utilitarian value and hedonic values. Ozen and Engizek (2014) noted that shopping is known to have what they called 'escapist and fantasy like qualities' p. 80. Unlike the shoppers who may be driven more by utilitarian values, a hedonic shopper is known to be motivated to shop for the sheer pleasure that they derive from shopping (To et al 2007). A hedonic shopper looks for emotionally enjoyable and interesting shopping experiences (Bhatnager and Ghosh, 2004). Arnold and Reynolds (2012) noted that there a variety of factors that can make a hedonic shopper derive value from shopping. They identify these factors to include among others the pleasure derived from as a sense of adventure or exploration associated with the shopping experience, the enjoyment generated from the product 'hunts' as well as a sense of relaxation that sometimes accompany shopping. They found that sometimes customers use shopping to help them wind down, alter negative mood into a positive one or simply help them escape from reality.

While most studies on shopping orientation are based on studies conducted in physical retail stores online retail managers need to realise that shopping orientations have a bearing on any type of retail store including online stores. Sarkar (2011) argue that just as with physical stores, online store managers need to be cognisant of the different shopping orientations that characterise customers as these have an influence on customer satisfaction. Research also shows that shopping orientation has significant influence on customers' attitude as well as on behavioural intentions (Yang 2010). Dennis et al (2010) noted that utilitarian shoppers commonly favour online stores associated with very high levels of ease of search as this allows them to easily

find products they may be looking for. Store atmospherics including visuals on the other hand are in general considered to be of great importance in trying to appeal to hedonic shoppers (Arnold and Reynolds 2003). It is imperative for managers of online stores targeting specific customer segments to have a good understanding of their online customers shopping orientation. Since gender is one of the most commonly used segmentation and targeting variable in retailing, an understanding of gender differences between male and female customers in general can be of great importance to online managers.

Gender scholars including Poggio, (2006) often acknowledge the need to look at gender not only as a physical differentiator of people but also as a social construct. Using a social constructivist approach, scholars are able to explore gender differences in a variety of things including differences in buying motivations and behaviours. Studies that have looked at male and female shopping behaviour often report findings that show differences between the two groups of customers. For example in traditional markets Wood, (1998) noted that women seem to enjoy shopping more than men and that they spend significantly more time shopping than men. He also found that women were more likely than men to make comparison shopping and hunt for bargains. Studies have also found significant differences in the way men and women respond to stimuli including marketing communications (Babin et al 2013).

Studies conducted in the context of online shopping have also reported findings that show differences between men and women in their shopping behaviours. Richard et al (2010) for example found that men and women differ in their navigation behaviour. They specifically found that men engage in less exploratory behaviour than women. They also found that men develop less website involvement compared to women. In line with the findings in literature one would thus expect male shoppers to be more task oriented and thus seek higher utilitarian value than women shoppers. One would also expect women shoppers to be more experiential oriented and place higher levels of importance on hedonic values than men. The following hypothesis posited will thus be tested in the study:

H1: Women online shoppers are more hedonic oriented in their shopping than male online shoppers.

H2: Male online customers are more utilitarian oriented in their shopping than women online shoppers.

## METHODOLOGY

The study followed a quantitative research design to collect data used in the analysis. The population of interest was online customers who were 18 years and above. Non-probability sampling was used to identify respondents as there was no readily available list of online shoppers in Gauteng that could be used as a sampling frame. Respondents were personally approached by data collectors and asked to respond to the questionnaires. The data collectors were present during the time that the respondents were filling in the questionnaire. The aim was to ensure that respondents queries, if any, were promptly attended to. At the end of the data collection phase a total of 201 usable responses were obtained. 51.2 percent of the respondents were female while 48.8 percent were male. In terms of levels of income 19.4 percent of the respondents indicated that their household income levels ranged from R5,000 to R14,999 while the rest indicating household incomes per month of R15,000 and above. 11.4 percent of the respondents were aged between 18 and 24, another 11.4 percent were aged over 50 with the rest aged between 25 and 49.

The study made use of a five point scale, ranging from 1 = strongly disagree to 5 = strongly agree, in order to assess the customers' shopping orientation. Each orientation was measured using four items. The items used were adapted from literature so as to enhance construct validity. The items were specifically adapted from Babin and Attaway (2000) as well as Arnold and Reynolds (2003). All data collected was analysed using version 21 of Statistical Package for Social Science (SPSS). The constructs were tested for reliability before being used in further analysis. This was done by examining each construct's alpha coefficient. The results showed that utilitarian orientation has alpha coefficient of .881 while hedonic orientation had an alpha coefficient value of .747. According to Hair et al (2010) alpha coefficient values of .7 and above indicate high levels of reliability. The main statistical tools used in the analysis include frequencies, means, standard deviations, factor analysis and independent sample t-test.

## RESULTS AND DISCUSSION

Factor analysis was run on the 8 items used to measure shopping orientation. This was done in order to ascertain that items used in each case were indeed related to the construct in question. The suitability of the data for factor analysis was assessed using the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and the Bartlett's Test of Sphericity. The results of this analysis are presented in table 1. According to Hair et al (2010) measure of sampling adequacy values of above .5 indicates that the data is suitable for factor analysis. In this study the KMO value was found to be .809. The Bartlett test of Sphericity helps assess the suitability of factor analysis by testing for the presence of correlations among the variables (Hair et al 2010). A significant p value as is the case in this analysis shows that the correlation matrix has significant correlations among some of its variables and thus suitable for factor analysis.

Table 1: Results of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.809
Bartlett's Test of Sphericity	Approx. Chi-Square	707.096
	df	28
	Sig.	.000

Presented in table 2 are results of the factor analysis conducted. The results show that all the 8 items used to measure shopping orientation loaded on two factors. The Eigenvalue for factor 1 was 3.444 while that of factor 2 was 2.039. The Eigenvalue presents the amount of variance accounted for by a factor. Together the two factors explained 68.533 percent of the variance in the data with factor 1 explaining 39.075 of the total variance and factor 2 explaining 29.458 percent of the variance. Significantly loaded on factor 1 (i.e loadings of .5 and above) were items related to hedonic shopping orientation while significantly loaded on factor 2 were items related to utilitarian shopping orientation. The results provide evidence of the validity of how the two constructs namely hedonic and utilitarian shopping orientation has been measured in this study.

Table 2: Factor Analysis: Customers shopping Orientation

Dimension	Item	Factor	
		1	2
<b>Hedonic Shopping Orientation</b>	I find spending time shopping to be truly enjoyable to me	<b>.862</b>	-.155
	When shopping, I feel a sense of adventure	<b>.836</b>	-.153
	I enjoy shopping for its own sake, not just for the items I may purchase	<b>.847</b>	-.116
	During shopping, I feel the excitement of the hunt	<b>.839</b>	-.008
<b>Utilitarian Shopping Orientation</b>	When shopping I usually accomplish just what I want to do	.376	<b>.646</b>
	I don't like spending too much time shopping around	-.241	<b>.696</b>
	When I go shopping, it is usually for a specific purpose	-.199	<b>.835</b>
	When I go shopping I look for just the items I want to buy	-.156	<b>.835</b>
	<b>Initial Eigenvalues</b>	<b>3.444</b>	<b>2.039</b>
	<b>Cumulative explained total variance (%)</b>	<b>39.075</b>	<b>29.458</b>
	<b>Total explained variance per factor (%)</b>	<b>39.075</b>	<b>68.533</b>

Table 3 presents findings relating to frequencies on levels of agreement to statements relating to the respondents' shopping orientation. The results show that the percentage of women who agreed or strongly agreed with each of the four statements showing hedonic shopping orientation was higher than that of men. The percentage of men who agreed or strongly agreed with each of the four statements showing utilitarian shopping value was greater than the percentage of women. There were less women who indicated that they disagreed or strongly disagreed with the statements relating to hedonic shopping orientation items than there were who disagreed or strongly disagreed with statements relating to utilitarian shopping orientation. In the case of men, except in the case of one item, there were more men who disagreed or strongly disagreed to statements showing hedonic shopping orientation than there were who disagreed or strongly disagreed with statements showing utilitarian shopping orientation. The exceptional item was that related to whether the respondents liked spending time shopping round. These results seem to point to the fact that women are more hedonic orientated in their shopping than men. They also seem to show that men are more utilitarian oriented in their shopping than women.

**Table 3: Frequencies – Gender and Shopping Orientation**

	Females			Males		
	SD/D	N	A/SA	SD/D	N	A/SA
<b>Hedonic Shopping Orientation</b>						
I find spending time shopping to be truly enjoyable to me	3.9	17.5	78.6	6.1	20.4	73.5
When shopping, I feel a sense of adventure	9.8	18.4	71.8	12.2	21.4	66.4
I enjoy shopping for its own sake, not just for the items I may purchase	5.8	22.3	71.9	11.2	28.6	60.2
During shopping, I feel the excitement of the hunt	11.7	22.3	66.0	14.3	27.6	58.2
<b>Utilitarian Shopping Orientation</b>						
When shopping I usually accomplish just what I want to do	11.7	16.5	71.8	3.1	22.4	74.5
I don't like spending too much time shopping around	41.7	15.5	42.7	16.3	32.7	51.0
When I go shopping, it is usually for a specific purpose	13.6	34.0	52.4	6.1	23.5	70.4
When I go shopping I look for just the items I want to buy	24.3	26.2	49.5	5.1	31.6	68.4

An independent sample t-test was run to examine if the differences in levels of shopping orientation between men and women are significantly different. There results of this analysis are presented in table 4. Note that the tests were done on each of the items as well as at the dimensional level. The findings show that although the mean values on all measures of hedonic shopping value were higher for women than men, the differences were not statistically significant (p greater than .05). On utilitarian shopping orientation, the results show that the mean values on all measures were higher for men than for women. The differences were statistically significant in all except one of the four items used to measure utilitarian shopping orientation. The findings also show that overall men were utilitarian in their shopping orientation than women.

**Table 3: Testing for gender differences in shopping orientation – Independent sample t-test**

	Descriptives			T-Test for equality of Means			
	Gender group	Mean	Std. Deviation	T	Sig. (1-tailed)	95% confidence interval of the Mean	
						Lower	Upper
<b>Hedonic Shopping Orientation</b>	Female	3.94	.857	1.431	.077	-.068	.426
	Male	3.76	.916				
I find spending time shopping to be truly enjoyable to me	Female	4.17	.919	1.366	.087	-.082	.453
	Male	3.98	1.005				
When shopping, I feel a sense of adventure	Female	3.86	1.076	1.067	.144	-.136	.456
	Male	3.70	1.047				
I enjoy shopping for its own sake, not just for the items I may purchase	Female	3.93	.952	1.319	.095	-.093	.467
	Male	3.74	1.058				
During shopping, I feel the excitement of the hunt	Female	3.81	1.076	1.180	.1195	-.123	.490
	Male	3.62	1.126				
<b>Utilitarian Shopping Orientation</b>	Female	3.45	.952	-3.282	.001	-.601	-.150
	Male	3.83	.626				
When shopping I usually accomplish just what I want to do	Female	3.92	1.091	-.866	.194	-.388	.151
	Male	4.04	.824				

I don't like spending too much time shopping around	Female	2.96	1.434	-3.134	.001	-.911	-.207
	Male	3.52	1.057				
When I go shopping, it is usually for a specific purpose	Female	3.54	1.118	-2.383	.009	-.610	-.058
	Male	3.88	.841				
When I go shopping I look for just the items I want to buy	Female	3.38	1.277	-3.197	.001	-.790	-.187
	Male	3.87	.833				

Therefore, Hypothesis 1 which states that women online shoppers are more hedonic oriented in their shopping than male online shoppers is according to the findings of this study not accepted. Hypothesis 2 which states that men online shoppers are more utilitarian oriented in their shopping than women online shoppers is accepted.

## MANAGERIAL IMPLICATIONS

The findings in this study have wide implications on successful management of retail stores including online stores. Firstly it is important for managers to realise that in marketing customer satisfaction cannot be achieved if a firm fails to meet customers' needs. While some of these needs are likely to be product specific some are to do with customers shopping experiences. The findings in this study point to the fact that customers have varied needs when it comes to shopping experiences. For example some customers want a shopping experience that will give them a sense of adventure while others want to find the needed products as quickly as possible and be done with shopping in the shortest time possible.

Managers of online shopping need to have a way of finding out the shopping orientation of a lot of their customers so as to ensure that they design their stores to facilitate this. One way in which managers can monitor this is by asking their customers' experiences with the store. Using short questionnaires online store managers can ask their customers to rate their level of satisfaction or dissatisfaction with the store on issues that can help them uncover the utilitarian and hedonic value that the customers perceive to be deriving from the store. If for example most of the customers indicate that they have problems with locating products, managers will realise that they are failing to provide acceptable levels of utilitarian value to their customers.

The findings in this study show that there are significant differences between men and women when it comes to utilitarian orientation with men being more utilitarian oriented than women. The result points to the need for online retailers selling products targeted at men to pay special focus on measures aimed at ensuring that clients are able to easily get the products they want without the need to spend too much time navigating the site. A highly detailed site map that allows customers to easily move from one product category to another is likely to be of much help in such cases. Other issues that may be of help include adequate labelling of links on site so that one can have a clear understanding of what to expect if they decide to click on that link. For example a link stating 'dresses' is less descriptive than ones where different types of dresses are given e.g 'evening dresses' 'casual dresses' etc.

The findings on hedonic shopping orientation show that although women had higher mean value than men the differences were not statistically significant. The findings point to the fact that when men and women go shopping, their concern is not only with the task of getting the product but also with the experience associated with product acquisition. Managers of online stores need to look for ways of ensuring that irrespective of gender, their customers are provided with a shopping environment that is emotionally stimulating. Managers can do this by paying attention to a number of factors including product displays and store décor in general.

## CONCLUSION

Success in retail business demands that managers have a good understanding of their customers and factors that influence their satisfaction. One area that managers need to focus on is their customers' shopping orientation. Failure to appeal to customers shopping orientation has the potential to result in customer dissatisfaction and unwillingness to revisit the store. The findings in this study show that female shoppers are

more hedonic oriented than they are utilitarian. They also show that male shoppers are more utilitarian oriented than female shoppers and that both male and female shoppers value the emotional benefits that are associated with shopping.

By investigating the shopping orientation of male and female online customers, this study contributes to alerting online managers of the varied needs that they need to cater for in ensuring that customers perceive their store favourably. These needs include issues of website design.

While the paper makes important contributions to understanding what managers of online stores need to keep in mind in order to run successful online retail stores, the study is not without limitations. One of the limitations relates to the fact that the study was conducted on a limited number of respondents drawn from an urban area. Future researchers in this area can take this limitation into account when designing their studies. Findings based on a much larger sample size of respondents drawn from different geographical areas can help further ascertain the differences and similarities that are there between men and women in their shopping orientation.

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# PERCEIVED RISKS TO ONLINE SHOPPING: AN EXAMINATION OF GENDER AND AGE DIFFERENCES

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## ABSTRACT

*The paper investigates levels of online shopping risk concerns among customers in different gender and age market segments. Data used in the analysis was collected from 201 online customers using a structured questionnaire. The findings show that irrespective of gender and age online customers main risk concerns relate to privacy, the existence and reliability of online retailers, total cost of buying online and product performance. No statistically significant differences were found in levels of risk concern that customers in the different gender as well as different age groups had. The findings point to the need for managers irrespective of their target age and gender segment, to take measures aimed at reducing customer risk concerns.*

**Keywords:** Risk concerns, online shopping, market segments, age and gender, South Africa

## INTRODUCTION

One area of e-commerce that is attracting a lot of research and business interest is the area of online retailing. Online retailing is about buying and selling of goods and services over the internet. Chang et al., (2005) observed that forecasters in the past predicted very rapid increases in profits from online shopping of more than three to five folds. They however noted that this to a large extent did not materialise with many online businesses facing total failure. While it cannot be disputed that online retailing has over the years grown, current statistics also show that the failure rates of online retail businesses is very high. For example, Ducker (2013) reported that 90 percent of all internet business start-ups fail within the first four months. According to Bizcommunity (2013) South Africa is the largest e-commerce player in Africa. While this is so statistics show that online sales still make up less than 1 percent of retail industry sales in the country (Maake and Shevel, 2013).

Whilst a number of factors may play in role in explaining the high failure rates as well as low levels of online sales compared to offline retail sales, failure to attract and retain customers is one of the main reasons. Studies aimed at understanding factors that influence online shopping decisions by individual customers highlight high levels of risk associated with online shopping as a major reason why many people shy away from engaging in the behaviour (Suresh and Shashikara, 2011). There seems to be a general agreement in literature that a good understanding of risk perceptions relating to online shopping by online store managers is critical in ensuring that they are able to attract as well as retain online customers (Featherman et al., 2010). According to Kim (2010:143) perceived risk can be defined as an individual consumer's belief about 'potentially negative consequences from his or her decision'. Masoud (2013) defined perceived risk in online shopping as the 'potential for loss in pursuing a desired outcome while engaged in online shopping' p. 77.

Since in retailing, it is common practice for retailers to segment markets and target one or a few segments within a market, this paper noted the need for studies aimed at understanding risk concerns at the segment level as well as differences if any between customers in different segments. While there are many variables that businesses can use for market segmentation and target decision making, the use of demographic variables including gender and age is wide spread. Lamb et al., (2010) noted that demographic variables are

actually the most commonly used segmentation variables in market segmentation. A good understanding of risk concerns at segment level is important in ensuring informed decision making by online retailers when looking for ways of managing risk in their respective online store operations. The specific objectives on the study are thus to (1) examine levels of risk concerns amongst male and female online customers (2) examine levels of online shopping risk concerns amongst younger and older online customers (3) determine if there are significant differences between male and female online customers in their levels of risk concern when shopping online (4) determine if there are significant differences between younger and older customers in their level of risk concern when shopping online and (5) outline the implications of the findings on risk management practices in online retailing.

The next section of the paper presents a review of literature followed by discussion of the methodology used in the study. Thereafter the findings are presented and discussed before outlining the managerial implications of the findings and concluding.

## **LITERATURE REVIEW**

The concept of market segmentation is well-known and practiced widely in the marketing field. It refers to the process of dividing a market into different groups that are homogeneous in terms of needs or other characteristics that make them respond in a similar manner to marketing efforts. Effective use of the market segmentation process requires that marketers pay attention to issues of identifiability, measurability, accessibility and actionability (Lamb et al., 2010). Demographic variables including age and gender are known to easily satisfy the four conditions required for effective segmentation (Cleveland et al., 2011). This is due to the fact that one can easily group customers according to age and gender and measure the number of people in each group thus easily meeting the conditions of identifiability and measurability. In terms of accessibility and responsiveness studies abound that show differences in the effectiveness of marketing efforts in reaching and persuading customers of different age and gender groups. For example, a study by Cleveland et al., (2003) also found significant differences between males and females in many aspects of consumer behavior including their response to advertising, product choice and information processing. Cummings et al., (2002) noted that companies use product features including size, color and design as well as advertising features such as media placement, themes and imagery to appeal to customers in different age groups.

Purchase behavior in general is associated with risk irrespective of whether it is done online or not. The impersonal nature of online buying and selling compared to traditional way may however lead to higher levels of perceived risk. Studies have shown that levels of perceived online shopping risk have significant influence on consumers' intentions to shop physically for products and services online (Zhang et al., 2012). Sources of risk in shopping can be varied resulting in perceived risk being viewed as a composite of different dimensions. Some of these dimensions include source related risk, financial related risk, product performance related risk, delivery risk and privacy related risk. Source risk relates to uncertainties that customers often have in ascertaining the existence and reliability of online sellers. This risk is likely to be more pronounced in cases where customers may be dealing with online stores they are not familiar with as well as those who have no physical presence i.e. pure online stores. Financial risk relates to customers' perceptions that money may be lost as a result of their online buying activities. There are different factors that can lead to loss of money when shopping online including the possibility that one may end up paying more money than anticipated due to hidden costs such as high extra charges for online payments. Financial risk can also arise due to difficulties in getting refunds back when there is need to do so (Hassan et al., 2006). Product performance risk refers to customers' perceptions that a product bought online may fail to meet expectations (Kim et al., 2008). The fact that products bought online cannot be felt before buying them makes product performance risk more pronounced in online buying unless one has bought a similar item before. Yeniçeri and Akin (2013) describe delivery risk as 'fear of not receiving products in time' p. 137. Apart from on time delivery of products, customers may also likely get concerned with whether products will be delivered in good condition or not and if not, how easy it is going to be for them to return the merchandise. The last dimension, privacy risk relates to 'potential loss of control over personal information.....' (Featherman and Pavlou, 2002, p. 1036). When one shops online, there is always the risk that personal information may be passed on to third parties without the shoppers' consent and/or used for unintended purposes. Loss of privacy can also result from activities of hackers who may get hold of customers' private information without the knowledge of an online retailer and use it to perform fraudulent transactions.

Traditionally, shopping is considered to be an activity that is preferred and commonly undertaken by women than men. Women are in most families responsible for household purchases. However, the advent of online shopping is bringing in new dynamics to not only the way men and women shop but also their perceptions relating to shopping channels. Thamizhvanan and Xavier (2013) as well as Li et al., (1999) found that online shopping is done more by men than women. Garbarino and Strahilevitz (2004) found that in the absence of recommendations from a friend, women are more averse to online shopping than men. As for age Gong et al., (2013) found that age is negatively related to online shopping intentions. Levels of perceived risk may explain differences between men and women as well as customers in different age groups when it comes to online shopping. Chaudhuri and Gangadharan (2003) noted that women tend to be more risk averse than men. Liebermann and Stashevsky (2002) found that younger people associated online shopping with less risk than their older counterparts. Based on findings in literature the following hypothesis are proposed for the study

H1: There are significant differences between male and female customers in levels of perceived online shopping risk.

H2: There are significant differences between younger and older customers in levels of perceived online shopping risk.

## **METHODOLOGY**

Data used in this analysis was collected from online shoppers in Gauteng. Due to lack of readily available sampling frame, non-probability sampling in the form of quota sampling was used in selecting respondents. The reason for using quota sampling was to ensure that both male and female respondents as well as online customers of different age groups were adequately represented in the sample. A structured questionnaire was used to collect the needed data. A five point likert scale ranging from 1 = strongly disagree to 5 = strongly agree was used to measure the extent to which the respondents agree to being concerned, when shopping online, with the various risk items under investigation. The demographic variable of gender was measured as nominal scale. Respondents were asked to mark the relevant box on the questionnaire indicating their gender as either male or female. Age was measured as an ordinal scale. Respondents were asked to indicate on a number of age categories the category they fell into. In order to enhance the validity of measures, the scales used to measure the different types of risk investigated were adapted from literature. Precisely items used to measure source risk were adapted from the study by Hassan et al (2006). Items used to measure product performance risk and financial risk were adapted from studies by Masoud (2013) as well as Suresh and Shashikala (2011). Delivery risk was measured using items adapted from Suresh and Shashikala (2011) and Zhang et al., (2012) while privacy risk was measured using items adapted from Zhang et al., (2012).

At the end of the data collection phase a total of 201 usable responses were obtained. 103 of these were females while 98 were males. 84 respondents were below the age of 35 while 117 were aged 35 years and above. The under 35 age group is referred to in this study as the younger online customers while customers falling in the other group are referred to as older online customer. Each of the scales used in the study was among other things assessed for reliability before being used for further analysis. The results of the reliability analysis showed that all the scales used in the study were highly reliable with alpha coefficients ranging from .783 and .924. According to Hair et al., (2010) alpha coefficient values of .7 and above indicate that a scale is reliable. Specifically the alpha coefficient for source risk was .918 while that of financial risk was .841. The alpha coefficient value of product performance risk was .783. Delivery risk and privacy risk had alpha coefficient values of .821 and .924 respectively.

Statistical package for social science (SPSS) version 21 was used to test the hypotheses put forward in the study. Specifically independent sample t- test was used to examine if there were significant differences in levels of perceived risk between the different groups of online customers.

## **RESULTS AND DISCUSSION**

Table 1 presents findings on levels of online shoppers' concern with perceived risk among customers of the two gender and age groups. The results show that at the overall level, both men and women have concerns regarding risks of online shopping. The overall mean value for men was 3.50 while for women it was 3.58. Results on age show that both younger and older online customers have risk concerns when shopping online. The overall mean for younger customers was 3.55 while that of the older customers was slightly lower at 3.53. While perceived risk is often used as a reason to explain why some people shop online while others do not, the results in this study show that the fact that one shops online does not mean that they have no risk concerns.

**Table 1: Descriptives – levels of perceived risk**

	Gender				Age group			
	Males		Females		Younger		Older	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>Source Risk</b>	3.53	.90	3.71	.88	3.63	.92	3.62	.87
Ascertaining the reliability and expertise of online retailers	3.47	1.01	3.60	.92	3.54	1.00	3.54	.95
Ascertaining the reputation of online retailers	3.53	.99	3.74	.94	3.62	1.02	3.65	.93
Ascertaining the real existence of online retailers	3.61	.93	3.80	.97	3.74	.98	3.68	.93
<b>Financial Risk</b>	3.50	1.00	3.56	.89	3.60	.97	3.45	.93
The ultimate price of the product because there might be hidden costs	3.64	1.08	3.74	.95	3.82	1.06	3.60	.97
Difficulties in getting back money if need be	3.38	1.13	3.38	1.17	3.37	1.24	3.38	1.08
Extra fees associated with online payment	3.39	1.11	3.56	1.09	3.62	1.06	3.38	1.12
<b>Product Performance Risk</b>	3.55	.93	3.49	.96	3.57	.91	3.48	.97
Quality of the delivered product may not live up to expectations	3.70	1.08	3.50	1.15	3.62	1.14	3.59	1.10
Product delivered may not be exactly as it appeared online	3.62	1.11	3.61	1.11	3.76	1.04	3.51	1.15
Difficulties in feeling and experiencing the product prior to purchase	3.32	1.03	3.36	1.27	3.33	1.17	3.34	1.15
<b>Delivery Risk</b>	3.36	.96	3.35	.97	3.30	1.03	3.40	.91
Products will not be delivered on time	3.42	1.11	3.37	1.14	3.37	1.19	3.41	1.08
I would have to spend much time if I want to return online merchandise	3.39	1.01	3.41	1.11	3.35	1.17	3.44	.98
Products will be delivered defective and therefore not fit for purpose	3.27	1.21	3.28	1.17	3.18	1.23	3.34	1.15
<b>Privacy Risk</b>	3.57	.97	3.76	1.00	3.65	1.04	3.68	.96
Personal information may be passed on to others without my consent	3.55	1.10	3.72	1.13	3.62	1.16	3.65	1.09
Personal Information may be used for other unintended purposes	3.58	.99	3.79	1.03	3.68	1.04	3.69	1.00
Personal information could be accessed by unauthorised users	3.57	.98	3.79	1.10	3.64	1.11	3.71	1.01
<b>Overall Risk</b>	3.50	.83	3.58	.76	3.55	.82	3.53	.78

Results at the dimensional level show that both men and women had the same risk factor, namely privacy risk, as a factor of highest concern. The mean for privacy risk amongst men was found to be 3.57 while amongst women it was 3.76. Delivery risk was found to be the factor of lowest concern amongst both men and women. The results amongst younger and older online customers also show that privacy risk is a factor of highest concern in both groups. The mean value for privacy risk was 3.65 for the younger group and 3.68 for the older group. Featherman et al., (2010) emphasise the importance of privacy and security issues in online shopping noting that it is one of the major issues that online retailers need to pay attention to as it exerts significant influence on online shopping decisions including purchase decision. Just like among men and women, delivery risk was found to be the factor of lowest concern amongst customers in both age groups.

An independent sample t-test was run in order to examine if the differences in levels of concern amongst customers of different gender and age groups were statistically significant. The results are presented in table 2. According to the results, there are no statistically significant differences between men and women in levels of risk concerns at both overall level as well as at individual dimensional level.

**Table 2: Gender and level of perceived online shopping risk: Independent Sample T-Test**

	Descriptives			T-Test for equality of Means			
		Mean	Std. Deviation	T	Sig. (2-tailed)	95% confidence interval of the Mean	
						Lower	Upper
Source risk	Male	3.71	.88	1.390	.166	-.073	.422
	Female	3.54	.90				
Financial risk	Male	3.56	.89	.677	.499	-.173	.354
	Female	3.47	1.00				
Product Performance risk	Male	3.49	.96	-.419	.676	-.318	.207
	Female	3.55	.93				
Delivery risk	Male	3.35	.97	-.032	.974	-.273	.264
	Female	3.36	.96				
Privacy risk	Male	3.76	1.00	1.407	.161	-.079	.470
	Female	3.57	.97				
Overall Risk	Male	3.58	.76	.712	.477	-.141	.302
	Female	3.50	.83				

**Table 3: Age group and level of perceived online shopping risk: Independent Sample T-Test**

	Descriptives			T-Test for equality of Means			
	Age group	Mean	Std. Deviation	T	Sig. (2-tailed)	95% confidence interval of the Mean	
						Lower	Upper
Source risk	Under 35	3.63	.92	.055	.956	-.245	.259
	35 plus	3.62	.87				
Financial risk	Under 35	3.60	.97	1.110	.268	-.117	.417
	35 plus	3.45	.93				
Product Performance risk	Under 35	3.57	.91	.668	.505	-.176	.356
	35 plus	3.48	.97				
Delivery risk	Under 35	3.30	1.03	-.713	.476	-.370	.174
	35 plus	3.40	.91				
Privacy risk	Under 35	3.65	1.04	-.261	.795	-.316	.243
	35 plus	3.68	.96				
Overall Risk	Under 35	3.55	.817	.196	.845	-.203	.248
	35 plus	3.53	.785				

Presented in table 3 are findings relating to examination of differences in level of risk concerns among the younger and older online shoppers. Just as with gender, the results on age show that at both the overall level and dimensional level, there are no significant differences in level of risk concerns between online shoppers in the two age groups. These results are inconsistent with findings by Liebermann and Stashevsky (2002). In general the findings in this study show that it is very much possible to have behavioural risk concerns and still be willing to undertake the behaviour. In the case of online shopping, customers are more likely look for ways of managing potential risk by among other things choosing the stores they buy from carefully.

## MANAGERIAL IMPLICATIONS

The findings of this study point to the need for managers to realise and acknowledge that the fact that one shops online does not in any way mean that they have no risk concerns. The findings show that male and female customers as well as customers in different age groups have significant risk concerns when they shop online. The fact that the levels of risk concerns between the different customer gender and age groups are not significantly different entails the need for managers of online store managers, irrespective to target customer group, to find ways of managing and addressing all the different dimensions of risk concerns. The fact that privacy risk concerns had the highest mean of the five online shopping risk dimensions looked at point to the need for managers to pay special attention to this factor. Assurances from online stores that their personal information will not be used for unintended purposes or passed to other people without their consent can greatly help in reducing such risk concerns. One way of doing this is for store managers to develop and post a privacy policy online. The policy needs to be placed where it will be visible and thus readily accessible in order to have any impact. Managers need to also take measures aimed at making sure that their staff members are conversant with the privacy assurances that the store provides to customers and what the policy pronouncement means in terms of what they are allowed to do and not do. The other issue related to privacy is the concern customers have relating to access to personal information by unauthorised users. This aspect touches more on systems security. Managers can deal with this problem by working closely with and making use of specialist service providers in systems security. Managers need to make sure that they have adequate authentication measures in place to avoid hackers from gaining access to their system and causing damage including reputational damage and loss of customer trust in their stores.

With regards to source risk, managers need to realise that it will be difficult for them, regardless of who they are targeting in terms of gender and age group, to attract new customers if it is difficult to ascertain their real existence as well as their reputation. For stores that are purely online, provision of information such as contact details including telephone numbers online as well as business registration details or membership to known business associations can help curtail fears that online shoppers in the different gender and age segments have. On the need to ascertain reputation and reliability online managers can consider having a customer review page. Comments left on such a page can assist other customers get an idea of the quality of service to expect from an online retailer. It can also help managers identify service areas where they are doing well as well as where improvements are needed. Findings on financial risk and product performance risk concerns point to the need for managers to be transparent and truthful in their dealings with all customers. They need to make sure that customers are provided with information relating to the total cost of owning the product and that they are not given a run around when refunds are needed. To this end managers need to also find ways of minimising the need for refunds without being unnecessarily punitive to customers. One way of dealing with this problem is by paying attention to product performance risk concerns of customers and ensuring that customers are provided with as much detailed information about the products as well as accurate pictorial presentations as possible. This will enable them have a good perspective on what to expect.

Delivery risk was found to be an area of least risk concern among customers in the different gender and age market segments. Wide use of online order tracking services by retailers may explain why delivery more especially time issues may not be of much concern. Order tracking helps customers to know where their products are and to have a clear perspective of when to expect it. It is also important to note that oftentimes online stores outsource delivery services to third parties. Use of reputable third parties can help managers deal with any risk concern that may be there relating to time as well as condition of products on delivery.

## CONCLUSION

Online retailing is a phenomenon with a lot of growth potential in South Africa. The probability of successfully exploiting this potential largely depends on retailers' ability to develop effective marketing strategies. This demands that among other things firms be able to have a good understanding of risk concerns that customers have relating to online shopping. Such concerns if not addressed have the potential to have a negative influence on growth of online retailing in general as well as the success of individual online stores. Apart from looking at risk concerns among online customers in general, researchers and online store managers need to also pay attention to customers within specific customer segments. Knowledge of differences and similarities if any, in the way different customer segments perceive different types of online shopping risk need

to be taken into consideration in developing risk management strategies. From the findings in this study it can be concluded that customers irrespective of gender and age group hold similar levels of concern relating to online shopping risk. It is important for managers to address the risk concerns identified irrespective of who they are targeting in terms of gender and age so as to help enhance customers' confidence in their stores.

By investigating differences in levels of concern with online shopping risk between men and women as well as between customers of different age groups the findings in this study can help managers targeting the different customer segments better appeal and serve their customers. While this is so, the study is not without limitations. One of the limitations relates to the fact that the study was conducted on a sample of respondents residing in a highly urbanised province of South Africa, Gauteng. The findings may not thus be generalised to the whole country nor to online customers residing semi-urban or rural areas. The second limitation relates to the fact that the study looks at online shopping in general without investigating differences in risk concerns that may be associated with different product categories. Future researchers can take these limitations into account when planning their research.

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# **FROM NASCENT TO MATURE INNOVATION ECOSYSTEM: CASE STUDY OF CZECH REPUBLIC AND ROLE OF ACCELERATORS**

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## **ABSTRACT**

*In today's global and sophisticated economy, the ability of a country to develop its entrepreneurial and innovation potential is essential to long-term economic growth and competitiveness. In this paper we focus on Czech Republic, one of the Eastern European countries that has succeeded in abandoning obsolete, unsustainable research infrastructures to make way for new, more promising ones. We examine the result of Czech Accelerator project on entrepreneurial activity in Czech start-ups. On the basis of (a) in-depth interviews that were conducted with participants, (b) interviews with Czech Accelerator group, and (c) archival data sources, this paper examines the factors that support and may mitigate the growth of Czech innovation ecosystem. This has implications for policymakers and business leaders in Czech Republic.*

*Keywords: Innovation, Entrepreneurial, Start-ups, Ecosystem, Czech Republic.*

## **INTRODUCTION**

In today's global and technology-driven economy, the ability of a country to develop its entrepreneurial and innovation potential is essential to its long-term economic growth and competitiveness (Oettl & Agarawal, 2008; Zweig, 2006). Since today's marketplace is defined in terms of rapid change and complex relationships, new perspectives to lead business evolution and economic development are required. An ecological approach has emerged as a viable framework for understanding the complex interplay between people and organizations in order to enable technology development and innovation (Moore, 1996; Bollier, 2000; Wulf, 2007a; Griffiths, et al. 2009, Jackson, 2011; Zhara and Nambisan, 2012). The ecological approach operates at the level of firm, business unit, technology, product and nations (Iansiti and Levien, 2004; Metcalfe and Ramlogan, 2008; Yawson, 2009; Carayannis and Campbell, 2009). All of them exhibit networks of interdependencies and ecosystem-like dynamics (Iansiti and Levien, 2004).

In this paper we focus on Czech Republic, one of the Eastern European countries that has succeeded in abandoning obsolete, unsustainable research infrastructures to make way for new, more promising ones (Blau, 2010). With respect to innovation, Czech Republic is now ranked 28<sup>th</sup> out of 142 countries on the 2013 Global Innovation Index. One specific public initiative to develop Czech companies is the program called CzechAccelerator. Managed by CzechInvest (the investment and business development agency of the Czech

Republic), the objective of CzechAccelerator is to support Czech firms in development of their management experience and marketing skills, which it primarily achieves by facilitating a deep engagement of these firms with other firms in innovation intensive locations across the globe. Although a formal definition of an accelerator is yet to be found in academic literature (Miller and Bound, 2011), accelerators (e.g. Czech Accelerator) are considered as innovative investment vehicles and business service providers that provide knowledge and support to young companies in their growth and development(Salido, et al. 2013).

While the number of accelerator programs has grown rapidly in the US and Europe (e.g. between 2007 and 2013 the number of European accelerators has risen nearly 400%), their success has been called into question (Birdsall, et al. 2013), and more research on accelerators and their success in equipping entrepreneurial firms is required (Barrehag, et al. 2012).This paper evaluates the role of Czech Accelerator (Czech Republic's public sector initiative) in enhancing private entrepreneurial activity as this country grows from a nascent to a mature innovation ecosystem. This paper examines the experience of 10 companies who took part in the CzechAccelerator program and identifies the new knowledge and skills they learned, new knowledge and initiatives they developed, new partnerships they established, and foreign investment these companies could attract.The results of this research will answer important policy questions such as what goals can be achieved by programs such as CzechAccelerator and how such programs build innovation ecosystem. Since most accelerators are very young, there is little empirical evidence to support the level of their performance (Barrehag, et al. 2012). This study is a step in that direction.

The paper is organized as follows: first, we review the concept of innovation ecosystem and identify the fundamental pillars of an innovation ecosystem at a national level. Since success of such an ecosystem will depend upon knowledge that is generated by interconnectivity among these pillars and knowledge that is exchanged among these pillars for creation of a thriving entrepreneurial community, we examine the role and success level of Czech Republic's public sector in enhancing private entrepreneurial activity. In the next section, we discuss methodology for collecting data. Next, on the basis of our data analysis of the 10 Czech companies that participated in this program, we offer findings and propositions. Finally, our discussion section provides directions for future research.

## **LITERATURE REVIEW**

### **Innovation ecosystem**

Applying ecosystem thinking to innovation management at national level is a fairly new concept. One of the reasons behind the emergence of ecosystem analogy is that traditional innovation models, which are based on input-output correlations such as R&D investments and patent counts, are insufficient to identify successful policy strategies that drive innovations at national levels (Yawson, 2009). New model of innovation referred to as the National Innovation Ecosystem provides a macro view of policies that drive innovations at national levels

This new perspective to organizations networks uses the biological ecosystems observed in nature as a metaphor for conceptualizing and explaining how a large number of interconnected actors and entities depend of each other for their mutual effectiveness and survival (Jackson, 2011). Like species in biological ecosystems, these actors and entities interact with each other in complex ways, and the health and performance of each of them is dependent on the health and performance of the whole. The participants in the ecosystem are not clearly defined, rather than establishing a static and clear boundary between them, it is better to gauge the degree of interaction between the participants and to depict ecosystems as communities of entities characterized by a given level and type of interaction (Iansiti and Levien, 2004).

Wulf (2007a) defines innovation ecosystems as an environment comprising interconnected institutions, laws, and policies that create an innovation infrastructure to include education, research, tax policy, and protection of intellectual capital. As in a natural ecosystem, each component of the innovation ecology has a role and the ecology must be adaptable to environmental changes. This can be a challenge for governments and organizations, as the ecology can lag behind the pace of technological change (Wulf, 2007b). Then, the innovation ecosystem should change if it faces new challenges. According to Yawson (2009), "an innovation ecosystem framework should not be lineal but rather a web, an interlocking systems and pathways helping to

sustain and formulate a functional evidence-based policy making” (p. 4), and should incorporate all aspects of society, including academia, government, industry and the public, thus creating a comprehensive National Ecological System of Innovation (Yawson, 2009). According to Mercan and Göktas (2011, p. 102), “an innovation ecosystem consists of economic agents and economic relations as well as the non-economic parts such as technology, institutions, sociological interactions and the culture”. Unlike the traditional innovation system models, characterized by its static nature, an innovation ecosystem has a dynamic nature; it is an ever-changing structure as consequence of changing markets conditions (Mercan and Göktas, 2011).

A recent research by Griffiths, et al. (2009) found that the confluence of the governmental, economic, as well as resources factors directly influences national innovative activity. According to the study, “innovation relies on a supportive infrastructure that is both economic and social. The greater the degree of R&D, the availability of a highly skilled labor force, and the amount of private and public venture capital funding, the more likely it is that a strong national innovation ecology will emerge” (Griffiths, et al. 2009, p. 384). In a similar work, but considering different components of innovation ecosystems, Mercan and Göktas (2011) found that the strength of university-industry collaboration was the most important dimension of an innovation ecosystem. The other two components in the study were state of cluster development and culture to innovate.

Studies in the field have identified several components of the National Ecosystem (Yawson, 2009; Mercan and Göktas, 2011; Heller, 2013). We describe them as five pillars of the National Innovation Ecosystem:

- 1 public sector: which includes innovation policy, government investment (R & D funding – as a percentage of GDP), innovation consortia, science and technology parks (technology incubators); government incubators;
- 2 private sector: which includes industry investment (e.g. R & D funding), enterprise networks, links between universities and business, private research centers, joint ventures (with foreign companies);
- 3 investor community: which includes venture capital investment and global R&D investment;
- 4 academia (universities, research institutions): which includes universities, highly skilled graduates/PhDs, output of publications, technology transfer offices in universities (aimed to transfer knowledge between universities to industry), regular brainstorming dialogs between academic and investor community about nascent technology and its potential capabilities and connections with private business; and
- 5 culture to innovate: which includes regulations, infrastructure, legal system, tax incentives, and an entrepreneurial culture.

Collaboration among these pillars will be important to jump-start the innovation ecosystem (Rubens, et al. 2011).

## **Innovation ecosystem & Czech Republic**

Czech Republic provides a good example of how collaborations among public and private sector enterprises can provide impetus to establishing a strong innovation ecosystem. In April 2010 the Czech Ministry of Industry and Trade launched the project CzechAccelerator, a business accelerator to help small and medium-sized start-ups with innovative products to reach five different innovation-intensive locations (Silicon Valley, Boston, Singapore, Israel and Switzerland). The selection of these five locations was intentional; these were all knowledge-based economies, with advanced start-up support system and venture capital funding. According to the CzechAccelerator group, the intent of sending Czech start-ups to these locations was to (a) gain knowledge, (b) acquire (or build relationships with) new partners, and (c) solicit capital investments.

An initial pilot phase of this project was conducted from April 2010 to March 2011 in California’s Silicon Valley in the United States. Success of this pilot phase resulted in expansion of this program to 40 Czech start-ups. Process for this program includes an initial call for participation that Czech Accelerator sends out. Participants are selected only if the applicant is:

- a small or medium-sized enterprise,
- possesses an innovative product, and
- has strong interest and motivation with regard to penetrating international markets.

Once selected, participation is required from participants in the form of

- One residency with duration of 3-6 months, or
- Two residencies during the course of a six-month period, of which each residency may not be shorter than one month and there must be an interval of at least one month between residencies. The total duration of both residencies must be at least four months.

What successful applicants receive:

- pre-departure legal and marketing training focused on formulating a business plan, effective communication with investors and patent protection,
- free use of office spaces in the selected destination,
- easy access to potential strategic partners and top-quality advisors,
- the opportunity to participate in regularly scheduled networking events and seminars with investors,
- familiarization with the local business environment through a foreign partner,
- travel costs and contribution for accommodation.

While this is an appropriate public sector initiative to promote private sector entrepreneurship, its periodic evaluation is necessary to gauge the continued momentum of trajectory. Further, since success metrics may differ between public and private sector, such an evaluation is useful to gauge the convergence (or divergence) of metrics among private and public sector.

This paper specifically reviews the role of Czech Republic's public sector in enhancing private entrepreneurial activity, and examines its level of success.

## METHODOLOGY AND SAMPLE

The lack of academic theory about accelerators in general, and the purpose of this study to evaluate, in particular, the success of the CzechAccelerator program in the acquisition of new knowledge and international expansion of the Czech companies define the exploratory nature of the study. An exploratory research strategy contributes uniquely to our understanding of a contemporary phenomenon within its real-life context (Yin, 1989). An approach of inductive theory building from qualitative case studies is suggested when there is little previous academic research available (Eisenhardt (1989), and when more empirical knowledge is needed for an overall understanding of a phenomenon (Besseyre des Horts, 1991).

The design of an exploratory study should state its purpose, as well as the criteria by which an exploration will be judged successful (Yin, 1989). In order to gauge success, metrics were established on the basis of scope of Czech Accelerator's objectives. Since the intent of sending Czech start-ups to various locations was to (a) gain knowledge, (b) acquire (or build relationships with) new partners, and (c) solicit capital investments, Czech Accelerator metrics were organized along these 3 pillars:

- Knowledge acquisition
  - Areas of knowledge acquisition that result in
    - new ideas; new initiatives
    - patent application in the destination
- Partnerships
  - number of technological agreements
  - number of business agreements
  - number of technological or business agreement in process
  - branch establishing in the destination
  - continue with business in the destination
- Solicit capital investment
  - % of equity and the amount of receiving fund

10 of the 40 firms were theoretically sampled for participation in this study. Multiple-case designs have distinct advantages. The evidence from multiple cases is often considered more compelling, and the overall study is therefore regarded as being more robust (Yin 1989). Our sample represents firms from different industries.

Care was taken to identify firms that had spent their residency in different incubator locations (e.g. US – Boston/Silicon Valley, Israel, Singapore). With regards to the number of cases, Eisenhardt (1989) considers that while there is no ideal number, a number between four and ten cases usually works well.

3 sources of data were collected (a) in-depth interviews conducted with participants, (b) interviews conducted with Czech Accelerator group in Prague, and (c) archival data sources. Data from multiple sources allowed us to triangulate the data (Eisenhardt, 1989).

Data was gathered in two waves: first, a questionnaire was sent to be filled out for the firm's member that had participated in the project, and second, an in-depth interview was conducted to deep dive into the questionnaire.

The questionnaire consists of 10 questions where the interviewee is asked about his/her experience with the program in terms of knowledge of successful startup management, new ideas and initiatives that came out from their stay, changes that they have been able to implement in their company resulting from their experience, as well as, changes in revenue growth, sales or productivity as a consequence of these changes. Finally they are asked to rate their experience with the program, and ways to do it more effective.

Several questions ask respondents to provide their degree of agreement or disagreement with the statements using a 5-point Likert scale ranging from “1-tremendously or excellent” to “5-not at all or poor”. Several other questions ask for a description or list about the topic of the question.

Table 1 describes the sample: firm name (pseudonym is used to protect the identity of the firm), principal activity of the firm, date when interviews were conducted, and incubator location.

**Table 1. Firms included in the study**

<b>m</b>	<b>Fir</b>	<b>Firm activity</b>	<b>ew</b>	<b>Intervi</b>	<b>bator</b>	<b>Incu</b>
<b>Ps</b>						
<b>eudonym</b>						
E	Electronic motorcycles		1/5/201	US		
M			3			
NE	Natural extracts		2/21/20	US		
			13			
M	Mobile app		5/2/201	US		
A			3			
B2	B2B solutions		3/1/201	US		
BS			3			
D	Diagnostic methods		3/15/20	Israel		
M			13			
C	Consulting Nanotechnology		3/25/20	Singa		
N			13	pore		
IE	Innovating education		10/4/20	US		
			13			
S	Software		10/10/2	US		
			013			
M	Management consulting		6/2013	US		
C						
DS	Digital software & Hardware		6/17/20	US		
H			13			

## DATA ANALYSIS

Data analysis is both the most difficult and the least codified part of building theory from case studies, since “unlike hypothesis-testing research, inductive research lacks a generally accepted model for its central creative

process” (Eisenhardt and Bourgeois, 1988). Following one of the tactics proposed by Eisenhardt (1989), we used the following approach. First, in order to be intimately familiar with each company individually, a case history was created for each of the companies studied to describe its experience and results with the Czech Accelerator program. This allowed us to identify specific pieces of information or patterns that might appear within each company before pushing to generalize patterns across cases. Second, in order to find patterns between cases, we organized all the information included in the case histories according to the three concepts that guided the data collection in our study: knowledge acquisition, partnerships, and solicit capital investment. Then, we proceeded looking for similarities and differences between cases. The results of this interaction are showed in the following section about research findings.

The analysis procedure was carried out by means of discussion groups. First, the researchers exchanged analysis and searched for patterns in the data; second, the researchers contacted with Czech Accelerator group in order to obtain a greater consensus regarding the experience and goals achievement with the program. After looking for similarities and differences between the cases, the process that follows is highly iterative, since it consists of systematically comparing the emerging structure with the evidence from each case. The aim is that the researchers should continuously compare the theory and the data, interacting towards a theory that will closely fit the data (Eisenhardt, 1989).

## FINDINGS

This section offers our findings on the success of this program, which was gauged on the basis of (1) knowledge acquisition, (2) developing partnerships and (3) soliciting capital investment. On the basis of these, we offer some propositions.

**Knowledge acquisition:** Findings demonstrate that immersion of these participant firms in the incubators mainly facilitated 4 specific types of knowledge acquisition (See table 2):

1. Market knowledge
2. Competitor knowledge
3. Knowledge about IP
4. Knowledge about distribution channels

Other types of knowledge (e.g. technology, financing, team, suppliers) were of less importance.

**Table 2. Areas of knowledge acquisition**

	High (1)	2	3	4	Not at all (5)
<b>Technology</b>		DSH	EM; MA; S	MC; NE; B2BS; IE	CN; DM
<b>Markets</b>	CN; DSH; MA; S	NE; DM; IE; EM	B2BS; MC		
<b>Financing</b>	MA	NE; CN; B2BS	DM; IE; EM; MC	S; DSH	
<b>Competition</b>	NE; CN	B2BS; MA; S; MC; DSH	DM; EM		IE
<b>IP</b>	NE; DM; MA; S; DSH	B2BS; IE; EM	CN		MC
<b>Team</b>			NE; B2BS; MA; DSH; S; MC	CN; DM; IE; EM	
<b>Suppliers</b>		CN; S		NE; B2BS; EM; MC	DM; IE; MA; DSH
<b>Distributors</b>	CN; S	NE; IE; MA	EM; MC	DM	DSH

	B2BS				
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Knowledge acquisition in the domains of market, competitor, IP and distribution channels contributed to specific creation of knowledge for these Czech participant firms. Respondent data suggests that knowledge that Czech participants gained during their immersion in the incubators resulted in new initiatives and new ideas for these participant firms (See table 3).

**P1.** Czech Accelerator program was most useful in acquiring knowledge in the domains of market, competition, intellectual property and distribution channels for the Czech participant firms.

**P2.** The experience and knowledge acquisition for the participants in the program has facilitated the development of a high number of new ideas and initiatives within the Czech participant firms. There was little evidence that participant firms could secure venture funding. Most participants were neutral about revenue or sales growth that their firms may have witnessed due to this experience. While three of the 10 firms mentioned that they have had some growth in revenue and/or sales/productivity due to their participation in this program, rest of the firms haven't yet witnessed such results and may need more time to see such effects of this program.

**P3.** Impact of the Czech Accelerator program on revenue growth and productivity of the participant firms was limited.

**Table 3. Key contributions from the Czech Accelerator**

	<b>High (1)</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Not at all (5)</b>
<b>New initiatives</b>	EM, MA, B2BS, CN, MC, DSH	DM	NE, S		IE
<b>New ideas</b>	MA, DM, CN, S, MC	EM, DSH	EM, B2BS, IE		
<b>Secured venture funding</b>				DM, MC	EM, NE, MA, B2BS, CN, IE, S, DSH
<b>Revenue growth</b>	S		MA, B2BS, DM, CN, MC, DSH	EM, IE	NE
<b>Sales/Productivity growth</b>	CN, S	B2BS	EM, MA, DM, IE, DSH	NE, MC	

Partnerships: Data from the interviews provide evidence that acquisition of knowledge in specific knowledge domains facilitated participant firms to acquire or build relationships with new partners. Some of these firms (e.g. EM, S) formed business agreements with partner firms in US. Others established a branch in the destination (e.g. EM & MA).

Engaged format of the program allowed participant firms to build relationships with their host country participants. This has facilitated in building partnerships in technology and business (See table 4).

**P4.** Participation in the Czech Accelerator program has facilitated Czech firms in developing technology and business partnerships with their host country participant.

**Table 4. Partnership achievements**

<b>Pseudonym</b>	<b>Firm achievements</b>	<b>Partnership Goal Achieved</b>
<b>EM</b>	Established a branch	Yes (one US branch)
	Built business relationships	Yes
<b>NE</b>	Found out about the market and about the possibilities	No
<b>MA</b>	Entrance to the US (new clients and new branch)	Yes
	Came with a goal of venture capital acquisition, but was unsuccessful	No
<b>B2BS</b>	Expansion in the US market	Yes
<b>DM</b>	Entrance to the Israel market and from there entrance to the US market	Yes
<b>CN</b>	Enter the Singapore and Chinese market	Yes (one company in Singapore)
<b>IE</b>	Got proximity to the Silicon Valley market	Yes
<b>S</b>	Export their software to US	Yes (found some partner)
<b>MC</b>	Expanded operations to the US and got experience with the international market	Yes (a new US company)
	Came with a goal to find an investor, but was unsuccessful	No
<b>DSH</b>	Entrance to the US market	Yes

Solicit Capital Investment: When mapped with Czech Accelerator success measures, it is clear that % of equity/venture funding and patent application in the destination are metrics that have seen little success.

Data suggested that for some participants it was too early to consider securing venture capital. One of the participants mentioned that they were not ready for seeking investors for their product and business.

**P5.** In the short term, the impact of Czech Accelerator on facilitating venture capital funding has been low.

## Networking: supporting the creation of international social capital

While networking was not an explicit metric of the Czech Accelerator program, analysis of our data revealed that networking and relationship building was a significant value that this program provided to participants. When asked about the best thing that participants took away from this program, seven of the ten respondents explicitly mention about networking and creation of relationships (see Table 5).

As two of the participants said: “Personal experience is the most valuable experience” and “...this is an experience which is difficult to be transferred. It’s not about some specific training, it’s not about some specific information, and it’s the whole ecosystem which is something worth being connected”.

**Table 5. Best thing participants took away from the Czech Accelerator program**

<b>Pseudonym</b>	<b>Best thing participants took away from the Czech Accelerator program</b>
<b>EM</b>	Assisting participants with getting established in the given environment and with establishing important contacts
<b>NE</b>	Personal experience. Meeting US people, get them involved and interested.
<b>MA</b>	Being in the most prestigious co-working environment (meeting, talking and getting feedback from people of the most important companies in the sector)



<b>B2BS</b>	Networking and referral network
<b>DM</b>	A new patent registered and a second one on its way to it The Israel market opens for them the Arabic market and the US market
<b>CN</b>	A great opportunity to start your business
<b>IE</b>	Being part of the Silicon Valley community.
<b>S</b>	Implementation of a teaching program in the company where employees teach each other to increase communication and technical qualifications
<b>MC</b>	Excellent experience, stimulating environment and networking
<b>DS</b>	A new approach to customers and product development
<b>H</b>	

**P6.** The Czech Accelerator program has facilitated the creation of an international and professional network for participating firms.

The Czech Accelerator program has been crucial for providing these firms with know-how and connections. The program has let the participants experiment a different institutional environment to create and do business, showing them the riches of different cultures and languages, and has let them enhance some key soft skills as how to communicate with customers, approach investors and present a product. In some cases the experience has even increased levels of confidence. As one participant declared: “I was pleasantly surprised how our product was accepted so our self-confidence and what we can achieve has risen a lot”

The program has exposed the participants to different cultures and languages, and has showed them how different management values can be a benefit or an obstacle in the way people interact and afford business. Insights such as open mindedness, communication skills, time appreciation, flexibility, happiness to learn and try new things, hard work, and focusing on the design of the product as much as on its functionality are some of the culturally sensitive values that participants took away from this program. This was especially important since business culture and environment in the Czech Republic culture is different. As one of them pointed out, “it is important to pay attention to subconscious things like the role of the colors in Asia, and incorporate it in the way you communicate in a particular society - it really makes a difference”.

**P7.** The Czech Accelerator program has enabled a greater understanding of different cultural and management values for the participating firms.

## DISCUSSION AND FURTHER RESEARCH

Czech Republic is an example of a nascent entrepreneurial ecosystem in Europe (Salido, et al. 2013). This paper analyzes a specific Czech public initiative, called Czech Accelerator, to support and develop private entrepreneurial Czech companies. Building interdependence between a public resource and private entrepreneurial activity is a way to enhance a nation’s innovation ecosystem. Therefore, accelerators are gaining credence as a public resource to provide knowledge and support for private entrepreneurial firms.

Despite rapid growth in the number of accelerators in US and Europe, there is little research to provide evidence of the success of accelerators. Research on evaluating their success is important so informed public policy decisions on supporting these accelerators could be made.

Results of this study demonstrate that companies participating in the Czech Accelerator program gained knowledge, especially in the domains of market, competition, intellectual property, and distribution; and that this knowledge resulted in new initiatives and new ideas for these participant firms. Most participants were neutral about revenue or sales growth that their firms may have witnessed due to their experience in this program, and there was little evidence that participant firms could secure venture funding. A deeper understanding of the impact of the program on revenue and sales growth would require a posterior analysis.

Our findings also show that the Czech Accelerator facilitated the creation of an international and

professional network for participating firms. While our study was not geared towards examining the moderating or mediating impact of networking on the goals and objectives of accelerator programs and of participating firms, there is evidence to support that international networks advance knowledge of foreign market opportunities, experimental learning, and trust (Carmel and Richman, 2013). Additional research should identify different types of networks (e.g. advice, friendship, workflow networks) that Czech Accelerator program has helped develop. Further analysis to link these different types of networks to different metrics would provide a deeper understanding of the types of networks that Czech Accelerator could specifically focus on.

Accelerators are mushrooming at a very rapid pace in different parts of the world. They are growing as a vehicle to promote entrepreneurship and are considered key to building an innovation ecosystem. In addition, different approaches to accelerating innovation and entrepreneurship are being deployed. So for example, while the Czech approach relies on sending participating firms to experience incubators and clusters in foreign countries such as United States, Singapore and Israel, the Chilean approach relies on attracting start-up companies to come to Chile. There is limited research on this topic and little is known on the best practices and policy approaches to building an ecosystem for innovation & entrepreneurship. A comparative study to examine the different approaches of accelerators would be informative.

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# INTERNATIONAL HUMAN RESOURCE MANAGEMENT IN THE CONTEXT OF HUMAN CAPITAL OF MULTI-NATIONAL ORGANIZATIONS IN LAOS

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## ABSTRACT

*Human resources is one of the key assets of organizations at both national and international levels and suggests that it becomes more complex once an organization is operating across borders. This research project was conducted in the context of the human capital of Laos as the host country. A questionnaire was administered to 90 employees of five international organizations in August 2013. The main finding was that the key constraint to practicing IHRM in Laos is the shortage of skilled labour. The belief also exists that education level supports employees in their job, but the result was not significant. The result was significant that education, regardless of level, can support employees' capacity to do their job.*

*Keywords:* IHRM, HR functions, human capital, Lao PDR

## INTRODUCTION

Human resources are part of the core capital in every organization and it is also likely to be true that the effective management of human resources (HR) largely contributes to the success of any organization. Nel et al. (2012) contend that HR plays an important role in all activities and that it is the means of endeavour in organizations, be it at national or international levels. Businesses use opportunities to expand their markets for larger sales and lower expenses on labour and raw materials by going global (Dowling, Festing & Engle, 2009; Du Plessis, 2010). The question then arises is what would the implications be when organisations experience rapid growth, which inevitably leads to globalisation and often global cooperation? These are also the consequence of the development of the appropriate tools to manage HR effectively, once an organization operates across borders. Therefore, the concept of international human resource management (IHRM) comes into play as well.

According to Sisavath (2014) the reasons for conducting this research project regarding IHRM can be traced back to after the opening up to the global economy of Lao in the 1980s. The spark was the re-alignment of a nationally-based production approach only into a global oriented business production and services approach (Bird & Hill, 2010; Otani, Anderson, & Pham, 2008). The formulation and implementation of the National Socio-Economic Development Plan (NSED), which set the target of country development in five-year terms or as it is informally called 'the five-year-plan', is the main driving force to expand the country's economy (Otani et al., 2008). In addition, Lao also embarked upon international cooperation by generating various measures to attract investment as well as international aid (Fane, 2006). Therefore the increase in bilateral and multilateral cooperation with countries and international organizations, as well as the reduction of barriers such as obstacles for investment, dramatically changed business activity in Lao since the 1980s. For example, in 2011 it was found that there were 433 foreign investment projects which amounted to a total investment of approximately USD2.9 billion (Lao Statistics Bureau, 2013). In addition, there are also 72 International Non-government Organizations (INGO) which implement 246 development projects in Laos (INGO Network Laos, 2014). This makes Laos a

very attractive investment hub in the world. Therefore, the need to take note of the application of IHRM, which is the focus of the research project presented in this paper.

The aim of this research project is to explore the actual application of IHRM, which includes human resource practices and staffing policies in the context of the human capital of multinational organizations in Laos.

## **LITERATURE REVIEW**

International HRM is broadly defined by Briscoe, Schuler and Claus (2009) as the study and application of all human resource management activities in the process of the management of human resources for businesses in the global environment. Specifically IHRM is the management of staff across country boundaries (Dowling et al., 2009; Nel et al., 2012; Vance and Paik, 2006). Additionally, IHRM has been redefined as the world-wide management of human resources (Morley and Scullion, 2004; Schuler, Budhwar and Florkowski, 2002; Shanine, Buchko and Wheeler, 2011). IHRM was also defined by Chen as cited in Du Plessis and Huntley (2009) as being “a set of distinct activities, functions and processes that are directed at attracting, developing and maintaining the human resources of a MNC” (p.414). The objective of IHRM is therefore to enable the organisations to be successful at the international level (Farndale et al., 2010; Johnson, 2009; Schuler et al., 2002). Additionally, IHRM is also claimed to be the tools for multi-national organizations to gain a global competitive advantage, to be efficient, locally responsive, flexible and quickly adaptable, as well as capable of transferring knowledge internationally. HR activities refer to the process of recruitment, training, utilising and compensating the people. The type of employees in the international context refers to the expatriates, host-country nationals and third-country nationals (Mondy and Mondy, 2012; Reiche, 2007). Finally, ‘country of operation’ refers to the host countries and headquarters. This means that the management of HR in the international context consists of the various dimensions for organizations to apply IHRM practices effectively.

Furthermore, Vance and Paik (2006) have classified the factors influencing IHRM into two categories. The first category focuses on external factors which include the economy, social preferences, competition, demographics, innovation and government. The second category being internal factors such as company culture, company climate, company strategy and organizational structure. Additionally, Härtel and Fujimoto (2010) identified some influences on HR policies and practice in the international context such as culture differences, differences in employment laws and regulations, different socio-political systems, labour market supply, local pressure groups, health and safety issues and language differences.

### **Human Capital**

In organizations, any human resource practice is a direct investment in the employees’ human capital, with the purpose of ensuring the competitiveness of the business and the development of its staff (Bisanav and Rangnekar, 2009; Noe et al., 2013). Generally, human capital is described as human knowledge, skills, innovativeness, and capabilities of employees applied to accomplish organizational goals (Armstrong, 2008; Bisanav and Rangnekar, 2009). Nel et al. (2012) describe human capital as the productive capabilities of individuals. This means the knowledge, skills, capability and experience that individuals have in creating economic value in the job they are doing. Human capital also refers to the unique set of knowledge, skills and abilities of workers which are acquired from education and work experience (De Winne and Sels, 2010). Based on these definitions, it seems likely that organizational success is the ability to manage human capital successfully.

In terms of a wider view, human capital development is the key economic driver (Ndinguri, Prieto and Machtmes, 2012), as it is prominent in various studies on the relationship between large pools of human capital and rapid growth of the economy. In terms of the organizational view, it means that organizations should have strategies to find the stock of human capital they need by enhancing their skills and knowledge through training programs and professional development, as well as rewards for superior performance (Nel et al., 2012).

The education of people in a country is another element of readiness for work and using human capital (Asghar, Awan, & Rehman, 2012). Bisanav and Rangnekar (2009) claim that education helps people to

understand their knowledge better and enable them to accurately predict outcomes, better manage time and resources and monitor results. Additionally, education also provides new information and knowledge that enormously impact on peoples' cognitive reasoning. Many studies have focused on the relationship between the country's education and the ability of human capital to generate economic growth. Those findings show that the country that invests more in education produces more effective human capital, and that effective human capital will again result in growth for the organization and the country's economy in general as well.

## **METHODOLOGY**

This research project is designed to use a mixed data collection method (or mixed method). Mixed method refers to the approach that combines qualitative and quantitative data collection and data analysis methods in one research inquiry (Borrego, Douglas and Amelink, 2009; Frels and Onwuegbuzie, 2013; Venkatesh, Brown and Bala, 2013). A quantitative approach was executed through a survey questionnaire.

According to Sisavath (2014) the data was collected from 90 employees by means of questionnaires who are at various levels in the five organizations in Lao. The data collection was done mainly in Vientiane, the capital of Laos, during August of 2013. The actual findings focuses on the data obtained from the survey only. Interview data is not discussed due to paper length limitations

## **FINDINGS**

The profile of the respondents is presented in this section in terms of gender, age, position and education. All demographic results are representative of the organisations which participated in the survey. Gender: A total of 44 respondents or 48.9% of the respondents are male and 46 respondents or 51.1% of the respondents are female. Age: A total of 71.1% of respondents are in the age-group of 20-35 years, 23.3% are in the age-group of 36-50 years and only 5.6% are in the age-group of 50-65 years. Position in organizations: A total of 37 respondents or 41.1% are Administrative officers, 31 respondents or 34.4% are Technical officers and 22 respondents or 24.4% are general operational officers. Education: The highest proportions of all respondents have a Bachelor Degree being 51 respondents or 56.7%. The other levels are: 14.4% with a Higher Diploma, 14.4% with a Master Degree, 8.9% has a Secondary School Completion Certificate and 5.6% with a Post-graduate Degree.

The findings are supported by scholars like Dowling et al (2009) and Du Plessis (2010) concerning approaches to deal with IHRM challenges faced by MNC like adjusting to local culture practices ability to do a job.

### **Survey Data**

The questionnaire results specifically focused on perspectives of Lao staff on their human capital in association to the highest education level they have achieved. Only results which are significant are fully reported being significant in levels of  $P \leq 0.05$ .

### **The belief of respondents that education can support their work**

This question focused on the respondent's opinions on whether their qualification can support their work in the various organizations. More than half of the respondents, namely 70%, answered that their education is the factor that supports the work they are doing now. Only 14.4% answered 'no' and 15.6% answered 'not sure'.

### **Respondent's self-confidence on their capacity to do their work**

This question focused on whether the respondents thought they have suitable capacity to do their current jobs. The results show that 74 people or 82.2% answered that they have suitable capacity to do their current jobs. Only 1 respondent or 1.1% answered that he or she does not have the capacity to do their current job. Also 15 respondents or 16.7% are not sure whether they have the capacity to do their current job.

### **The importance of capacity enhancement for career advancement**

This question pays particular attention on the perception of respondents regarding capacity. Respondents were asked to rate the importance of enhancement of capacity for their advancement. A total of 78 or 86.7% of respondents regard the enhancement of capacity as very important. Only 11 or 12.2 % saw it as somewhat important. Only one respondent or 1.1% saw it as neutral.

It is clear that the issue of education, self-confidence and capacity to do the job and advancement of career are important issues. These aspects are elaborated upon in the next section.

## Testing of results to identify significance

One of the main objectives of this research was to find out what the educational level of Lao human capital was. Therefore this section mostly provided data on the capacity of Lao staff in association with education levels. All results were tested for a Sig. value for significance where the P-value ( $p \leq 0.05$ ) being applied to identify significance.

## The association of the highest education achieved and the belief that education can help in their work

The relationship between the highest education level respondents has achieved and the proportion of respondents who believe that their education will assist them to do the job is analysed. All categories believe that their education can support their work. A total of 39 respondents who completed a Bachelor Degree believe that their education can help them in their work and only 6 of the respondents in the same category believe that their education does not help them to do their job. Overall 63 said “yes”, 13 said “no” and 14 were “unsure” of the 90 respondents. The Sig. value of the test is 0.418 which is considerably higher than the P-value ( $p \leq 0.05$ ), and therefore the result did not load at a significant level. It can be concluded that there is no significant relationship between the highest education achieved and the belief of respondents that their education can support their work.

## The relationship between the highest education achieved and capacity to do the job

The results show the relationship between the highest education that respondents have achieved and their capacity to do the job. Most of the respondents in all educational categories think that they have the capacity to do the job, for example, respondent who have achieved a Master Degree, namely 12, think that they can do the job, and 41 with a Bachelor’s degree believe similarly. Overall 74 said “yes”, 1 said “no” and 16 were “not sure” of the total of 90 respondents. The results show a Sig. value of 0.174 that is a higher value than the P-value ( $p \leq 0.05$ ) and the result therefore did not load at a significant level. It can be concluded that there is no evidence of a significant relationship between the level of education and the capacity to do the job of the staff in the target organizations.

## The relationship between the belief of respondents that education can support their job and their perception of their capacity to do the job

Table 1 compares the belief of respondents that education can support their job and their perception of their capacity to do the job after both variables have been compared to the highest level of education of the respondents. It was found that 63 respondents believe that their education supports their work and also perceive that they have the capacity to do the job. In addition, 13 respondents do not believe that their education can support their work, but they believe that they have the capacity to do the job, whilst 14 were unsure.

**Table 1: Your education can support your work and your capacity to do the job**

		You have ability to work in the position			Total
		Yes	No	Not sure	
Your education helps your	Yes	63	00	00	63

work	No	-	13	--	13
	Not sure		-	1	14
Total		63	13	14	90

Table 2 shows the result which is significant. It can be seen that the Sig. value of the test is 0.043 which is lower than the P-value ( $p \leq 0.05$ ). It can be concluded that there is a significant relationship between the belief of respondents that education can support their job and the perception of their capacity to do the job.

**Table 2: Chi-square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.858 <sup>a</sup>	4	.043
Likelihood Ratio	10.117	4	.038
Linear-by-Linear Association	.528	1	.467
N of Valid Cases	90		

## The relationship between the between the highest education achieved and the importance of capacity building

The results show the association between the highest education level that respondents have achieved and the importance of capacity building. It is clear that the majority of respondents in all educational categories see capacity building as very important where from the total of 90 respondents, 78 regarded it as very important, 11 as somewhat important and 1 as neutral. The significant Sig. value which is 0.134 is higher than the P-value ( $p \leq 0.05$ ). Therefore, it can be concluded that there is no significant relationship between the level of education and the importance of capacity building.

## DISCUSSION OF FINDINGS

This section focuses on education level and human capital in relation to the HR activities that are applied by the international organizations. The survey data show that almost all the respondents spent between 11 to 17 years studying. This means they have a certain level of human capital. From the survey results it is clear that most of the respondents believe that their education supports their work and that they are capable to do the job. Hence, it is interesting to investigate whether there is a significant relationship between their highest educational qualification achieved and their human capital. The findings are presented below based on the various hypotheses that were tested.

**Hypothesis 1: There is a relationship between the highest education achieved and the belief that education can support the respondents' work.** There is no evidence of a significant relationship between the highest education level achieved and the belief of respondents that their education can support their work. This means that the idea that a higher education level supports the belief of respondents that education can support their work is unsupported by the results because the significance level was also above the P-value ( $p \leq 0.05$ ) level.

**Hypothesis 2: There is a relationship between education level and the perception of staff regarding their capacity to do the job.** There is no evidence of a significant relationship between education level and the perception of staff regarding their capacity to do the job in the target organizations. Therefore, we can conclude that the information on the education level of staff is independent from the perception of staff members of their capacity to do the job. It is concluded that a higher education level does not mean that the staff have a higher capacity to do the job. The result is also unsupported from a significance point of view being above the P-value ( $p \leq 0.05$ ) level.

**Hypothesis 3: There is a relationship between the beliefs that education can support their work and the perception of their capacity to do the job.** The test results in Table 6 show that there is a significant relationship between the belief of respondents that education can support their job and the perception of their capacity to do the job. This means that most of the respondents who believe that their education can support their work are more likely to perceive that they have the capacity to do the job. This is confirmed with a test result of the Sig. value of the test being 0.043 which is less than the P-value ( $p \leq 0.05$ ).



**Hypothesis 4: There is a relationship between education level of staff in the target organization and their perspective on the importance of capacity building.** It is clear that there is no significant relationship between education level and the perspective on capacity building. This means that no matter how high the education level of staff is, it does not affect the perspective of staff regarding capacity building. It is concluded that people who have higher education levels do not see capacity building as significantly important.

## CONCLUSIONS AND MANAGEMENT IMPLICATIONS

According to Sisavath (2014) it is clear that most participant organizations use the Geocentric and Regiocentric approach. The main issue they face in Laos in practicing human resource activities, however, is the shortage of skilled labour, but they do not have any problems with cultural differences. It is also important to note some issues regarding Lao human capital. A higher education level does not make respondents believe that their education can support their work. Additionally, a higher education level does not mean that the staff members have a higher capacity to do the job. Also, most of the respondents who believe that their education can support their work are more likely to have more capacity to do the job. Furthermore, having a higher education level does not affect their perception of capacity building.

The research results also identified some management implications that can be applied in international organizations, in particular in Laos. These are outlined below. The main concern of the HR managers in the participating organizations was that employees have no initiative and that they are risk averse. It could be that staff is not able to apply what they have learned to the actual work situation. It was also found that one element is missing from the HR functions in these organizations namely management of rewards. The effective management of rewards can be the key to overcome this problem. It is widely-recognized that rewards can be used to improve employees' efforts and performance (Sisavath, 2014). Additionally, it is also acknowledged that rewards have a huge impact on organizational corporate culture. Therefore, if the participant organizations want to encourage initiative, they may have to value the employees more by providing them with appropriate rewards, since employees will be more motivated when they know that what they do is what is valued by the organization. This also supported by the research of Dowling et al (2009)

Managers must acknowledge that HR managers should maintain continues learning and growing environment of the organization's employees. Even though Lao staff is knowledgeable, skillful and capable, the actual data obtained indicates that Lao staff needs to improve their performance. Additionally, the findings also established the need for capacity development regardless of the educational background of employees. Therefore, the support for learning by providing equal opportunity, participation in training and a chance to grow could be some of the key success factors for the international organizations to enhance its human capital potential in Lao.

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# **AN INVESTIGATION INTO EMPLOYEES' SATISFACTION REGARDING LEADERSHIP STYLES IN THE LAOS BANKING SECTOR**

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## **ABSTRACT**

*Leadership is one of the key management functions which enable an organisation to sustain its competitive advantage develop both its employees and organisational outcomes and has a direct impact on the performance and motivation of employees. This study identified practical leadership styles that the banking sector in Laos should apply to improve employee performance and motivation to provide better service to clients. The results based on 116 useable questionnaires revealed that poor leadership management is one of the key reasons that affect the performance and motivation of staff. It is recommended that leaders should apply four leadership styles, namely authentic, transformational, charismatic and participative. Using these leadership styles will perhaps lead to improved employee performance and motivation at work.*

*Ke words:* Leadership style; motivation; Laos banking sector; human resources

## **INTRODUCTION**

Leadership plays a significant role in organisational development and is also a significant factor that helps and motivates employees to increase their performance (Yadav, Bhatnagar & Singh, 2012). Daft and Pirola-Merlo (2009) point out that effective leadership can influence and support employees to work enthusiastically and achieve organizational goals. In order to increase organizational performance, it is essential to ensure that employees perform at their full potential. Therefore, developing the right leadership style that fits a particular organizational culture will influence subordinates' sense of leadership and create a feeling that they are performing a vital task. This is necessary to achieve the organization's success and it helps to motivate employees to have a better attitude and become more productive in an organization.

In Laos, it appears that leadership management in organizations is a new concept for many businesses. After many years of political turmoil up to the 1990s, the country's leaders strongly focused on political issues rather than the national economy with the consequence that there was little emphasis on businesses development (Bank of the Lao PDR, 2008). However, in recent times many Lao organizations, especially the banking sector, have had to focus more on organizational management due to high competition in the banking sector (Keovongvichith, 2012). However, according to Asian Development Bank (2011), the current level of banking services and the financial system in Lao Peoples Democratic Republic (PDR) is still low compared to international standards. The reasons behind this problem are mainly poor management in organizations, which affects the overall performance. The other main reason is an insufficiently skilled workforce in the financial area as well as a low motivation to work in the banking sector (Keovongvichith, 2012).

The research project aimed to discover the practical leadership styles that the banking industry in Laos could apply to improve employee performance and to increase the motivation of the staff in the work place. This paper explores current leadership styles in the Laos banking sector and circumstances that may improve leadership and motivation in order to identify appropriate leadership styles that employees would prefer to practice in the workplace.

# LITERATURE REVIEW

In today's fast changing environment, flexibility and adaptability are important factors for organisations to survive and thrive. Organisations need capable leaders to monitor environmental change and provide the necessary force to encourage, motivate and inspire followers and guide them in the right direction (Adeniyi, 2010). David and Stanley (2013) suggested that to improve workplace performance, it is important to understand three main inspirational leadership theories: charismatic, transformational and authentic leadership.

Griffin (2011) point out that charisma is an individual characteristic of a leader and a form of interpersonal attraction that influences subordinate behaviour. Leaders with charisma tend to have a lot of self-confidence, good communication skills and the ability to inspire followers to increase their work performance. Daft and Pirola-Merlo (2009) explain that charismatic leaders have the ability to motivate people to have more commitment to work and inspire followers to work more than they would normally do. Transformational leadership is closely related to charismatic leadership because these two leadership styles rely strongly on the individual leader's personal characteristics. However, transformational leadership is a slightly broader concept, because this type of leader inspires subordinates not just to follow leaders, but also to become leaders themselves while achieving organizational goals. Transformational leaders have the ability to inspire followers to high levels of performance by helping them develop their potential, inspiring vision, showing optimism about the future and empowering them to make change happen. Härtel and Ganegoda (2008) define authentic leaders as "those individuals who are deeply aware of how they think and behave and are perceived by others as being aware of their own and others' values/moral perspectives, knowledge, and strategies; aware of the context in which they operate, and who are confident, hopeful, optimistic, resilient, and high on moral character" (p.159).

David and Stanley (2013) point out that, the five most well-known approaches to understanding the different leadership styles are autocratic, democratic, participative, goal-oriented and situational leadership. Daft and Pirola-Merlo (2009) state that "an autocratic leader is one who tends to centralize authority and derive power from position, control of rewards and coercion" (p.42). Adeniyi (2010) point out that autocratic leadership is sometimes called "directional leadership". Leaders who use this approach lead by telling others what to do and these leaders will make decisions without consulting the employees who will be affected by them. Gill (2011) criticizes this approach by saying that it can work well only in the short run, but that it is not effective for long term management and it is not appropriate for improving quality of work either. Pride, Hughes and Kapoor (2009b) define a democratic leader as "one who holds final responsibility, but also delegates authority to others, who help to determine work assignments, communication is active upward and downward" (p.171). Democratic leadership is also known as *consensus* or *consultative leadership*. Leaders take this approach to allow employees who work in the particular area to be involved in decision-making. Pride, Hughes, and Kapoor (2009a) define participative leadership as a "leadership style in which all members of a team are involved in identifying essential goals and developing strategies to reach those goals" (p.180). David and Stanley (2013) state that leaders using this style require team members to focus solely on the organizational goals and minimize their concentration on the influence of other factors that are unrelated to the specific goals. Ronald (2010) states that the goal-oriented leadership style concentrates on process and structure, especially on what to do how to do it and who will do the task. Leaders who employ this style focus on making decisions and directing their followers. According to Cassidy and Kreitner (2009), goal setting in an organization is the process of developing employees' job performance with objectives, deadlines and quality standards. Lussier (2011) defines situational leadership as an approach that attempts to find an appropriate leadership style for particular circumstances. Situational leadership is also called *contingency leadership* according to Hersey and Blanchard (1982). Leaders who apply this approach can determine what leadership style is suitable and an appropriate fit in a particular circumstance, so the same manager would apply different styles (Obolensky, 2010). Buckingham and Coffman (1999) contend that the difference between a manager and leader is much more profound than most people think, and that the organization which overlooks this difference will suffer for it. Great managers look inward to focus on people, process, systems; operations, people capability and development, individual style, goals, and needs and motivation of each person. Such differences may be small and subtle, but a great manager who pays attention to such subtleties gain insight toward the right way to release each person's unique talents and achieve greater levels of performance and productivity.

Great leaders on the other hand according to Buckingham and Coffman (1999) look outward. Their focus is on developing and achieving organization vision and into the future, on competition, on evolving markets and trends, seeking connections and cracks and alternative paths forward for the organization, developing organizational advantage. The organisation draws on their visionary and strategic thinking, and their ability to activate strategy. While a great leader plays a critical role, it doesn't have much to do with the challenge of turning people talent into performance. A great manager may fail as a great leader, and the reverse is also true. This insight and awareness when developing a satisfying work environment, will inform a suitable talent acquisition and development plan for senior management and leadership in the Lao banking sector.

It is also important to note that in order to improve the satisfaction and performance of employees, Leaders should also consider having four the basic elements that are needed for a performance management system: strong performance goals, ongoing feedback and coaching, an accurate evaluation process, and a reward system.

Ethical leadership is also an important element of the quality leadership. Gini (2010) states that ethical leaders have a great influence on the ethical culture in a workplace, because leaders can create vision and be role models for their subordinates. Therefore, it is vital for a leader to develop the image of moral leadership.

## **RESEARCH METHODOLOGY**

The research project employed mixed methods (applying both qualitative and quantitative methods). Data collection by means of questionnaires was used to survey the opinions on leadership and work motivation of staff in three selected commercial banks in Laos.

The reasons for selecting these three banks is because each bank has a different nature of business so that the data collection can represent different views of employees, which enables different perspectives to be recorded for data analysis purposes. The researcher travelled to Laos to conduct the research during September 2013 after permission to execute the survey was received.

Before the final questionnaire questions were compiled, the researcher applied it to 10 Lao bank employees as a pilot test to determine whether the questions were clear and made sense. As a result the questionnaire was revised and improved by removing difficult, unnecessary or ambiguous words. A total of 150 questionnaires were distributed in paper format to ensure a minimum of 100 useable responses and therefore 50 questionnaires were dispatched to each bank. A total of 116 useable questionnaires were received.

All data obtained via the questionnaire was analyzed and interpreted by using SPSS (Statistical Package for the Social Science). The data analysis methods included frequencies, correlation and T-Tests in order to test the research hypothesis. Coding and categorizing techniques were also employed in this research project and it also applied grounded theory to discuss further outcomes.

The primary research question of this research project was: "What are practical leadership approaches that would increase workplace motivation in the banking industry in Lao P.D.R.?"

The research project therefore aimed to discover the practical leadership style that the banking industry in Laos should apply to improve their employee performance and to increase motivation of the staff at work. The main objectives were therefore as follows: Firstly, to identify the practical leadership style that can increase employee motivation in the workplace. Secondly, to explore the current leadership style in the banking sector. Fourthly, to discuss the appropriate leadership style that employees prefer to be subject to in the workplace. Fifthly, to identify the main factors that motivates employees to work.

Hypothesis – Employees at all levels in the Lao banking sector recognise the importance of leadership. The alternative hypothesis was: Not all employees at all levels in the Lao banking sector recognise the importance of leadership. The alternative hypothesis was supported as a result of the research outcomes.

## RESULTS AND DISCUSSION

Various categories are presented for discussion such as demographic profile, work performance, leadership and motivation. These elements are considered as vital information to be used to answer the research question and to make recommendations.

The demographic data is a representative profile of the employees of the three banks. From the total of 116 respondents, 75 (65% of the total respondents) were female, and 41 (35%) were male. In terms of age, the majority of respondents were in the age group between 24-29 years of age, which was 43.1% of all participants. The second highest frequency of respondents was between 30-39 years of age, which represents 30.2% of the total. The third highest frequency was between 19-23 years of age, which represents 16.4 % of the total. The result is in line with the general employment percentage of the working population in Laos.

In terms of working experience, the highest percentage of participants has worked for between 2-5 years, which represents 56.9% of the total respondents. The second highest percentage of participants is between 6-10 years, which is 20.7%. Furthermore, 9.5% of the participants have working experience of more than 16 years. It is interesting to note that there are a very low number of participants who have working experience of less than one year and between 11-15 years, which is 6.9% and 6% respectively. Regarding education, the outcome of the survey revealed that the highest number of respondents has a bachelor degree, namely 90, which represents 77.6% of the total number of participants. The second highest number, 19, have achieved a Master degree, which represents 6.4%. There are only 6% of respondents who have a TAFE degree, but it is noted that at the top end of qualifications there were no respondents with a doctoral degree.

A limitation of this research project is that the data collection was only conducted in Vientiane which is the capital city of Lao. Hence, result from the survey might not certainly present the overall perception of banking staff in nationwide in Lao.

### **The importance of leadership**

The results of the survey show that respondents recognized leadership from top management as being very important to the success of the banks where they work. The most significant finding is that the majority of respondents said that leaders are important, because they are the role models for their subordinates, especially the ethical role model responsibility that they have. This view is also strongly confirmed by many studies such as Cremer (2009) and Grover & Moorman (2009) who state that leaders have a great influence on the ethical climate in an organization and employees are motivated to work better for leaders who have an image of integrity. The empirical research of Nel (2008) also supports the view that to ensure a constant focus on ethical procedures in organisations, leaders should not hesitate to institute disciplinary action against employees who break the rules.

According to the findings, the majority of respondents, being 90.5%, acknowledged that leadership plays a “significant role” in the organization and only a very small number stated that leadership is “quite important” in the organization. The results clearly show that employees are highly aware of the importance of leadership to contribute to the success of the banks, but it is not the case for all employees. Leaders must therefore have the necessary knowledge, skills and a clear vision for the organizations, and they must ensure good team work and promote friendly relationships in an organization if leadership is to be effective, according to the respondents.

### **The current leadership practices in the Lao banking sector**

One of the objectives of the research project was to explore current leadership styles in the Lao banking sector. The results show that most of the managers execute their leadership style in more than one way. The goal-orientated leadership style was clearly shown in the responding banks. Leaders direct their teams by providing decisions and setting specific tasks for each of their subordinates. Leaders primarily focus on the organizational goals, provide clear tasks for each employee and encourage team members to give maximum effort toward goal achievement. These practices are strongly related to the goal-oriented leadership style where

leaders concentrate on process and structure, especially on what to do, how to do and who will do a task. They also require team members to focus solely on the organizational goals and minimize their concentration on the influence of other factors that are unrelated to the specific goals (David & Stanley, 2013; Ronald, 2010).

Another leadership style which was recorded was the autocratic leadership style. The findings from the questionnaire revealed that the majority of employees recognized that their immediate superiors often make a decision and provide instruction on how to do the job. Furthermore, some employees also stated that their superiors rarely asked for their ideas and suggestions before making decisions. This practice is strongly related to the autocratic leadership style where leaders lead by telling others what to do and leaders will make decisions without consulting the employees who will be affected by their decisions (Adeniyi, 2010). The participative leadership style was also recorded by respondents as being executed in the Laos banking sector. In fact, some leaders usually give advice to their subordinates, rather than giving direction on how to do the job. This practice supports the participative leadership style which is supported by Obolensky (2010), who states that leaders who use this approach apply little control over the process of decision-making and concentrate mainly on moving the team towards consensus rather than having control over all tasks.

According to the survey results, some employees were not satisfied with their immediate superiors' leadership practices. Employees' satisfaction towards to immediate superiors' leadership was that 44% of respondents have moderate satisfaction, 39% to a limited extent, 9% to a considerable extent, 5% to a very great extent and 3% not at all. There were six main reasons listed by respondents why they recorded this result regarding satisfaction with their immediate superiors' leadership style. These reasons are presented below.

The first reason respondents listed was the unfair practices of their superiors. The second was that employees were concerned that their leaders focused too much on the goals, which makes them feel stressed by deadlines and the unreasonable workload in their everyday work. The third reason was poor organizational policies, and the fourth reason was about decision-making. A number of employees revealed that their leaders often made most of the decisions on behalf of staff, and that staff just had to follow all instructions that were made by their leaders. The fifth reason was that employees felt that their leaders could play a bigger role in building good relationships in the organization. The last reason was that employees were concerned that their superiors rarely talked optimistically about the future of employees in the organisations.

## **Preferred leadership styles**

The key objective of the research project was to identify the leadership style that employees preferred to be practiced in the workplace. Results from the survey show that there are four main leadership styles that employees wished their leaders to practice in order to improve their work performance and motivation at work. The four identified leadership styles were authentic, transformational, charismatic and participative leadership. A summary of the practical leadership styles that employees in the Lao banking sector preferred their leaders to practice is presented in Figure 1. The reasons for employees choosing a particular leadership style are discussed in the following section.

The most preferred leadership style employees chose is the authentic leadership style, which mainly relates to the ethical practices of leaders. According to the survey results, the majority of employees, or 74.1%, suggested that the most important characteristic that leaders should have is ethical practice. Employees also pointed out that leaders should execute fair practices to all employees and should ensure that every staff member perceive themselves to be an equally important part of the organization's staff cadre. Furthermore, results from the survey showed that a high number of employees required leaders to provide a good working environment. This sentiment is also echoed by Nel et al. (2012) as being extremely important to encourage a productive and motivated workforce in an organisation. Hence, the fair practices of authentic leaders enhance employees' optimism and also create a good environment in the workplace.

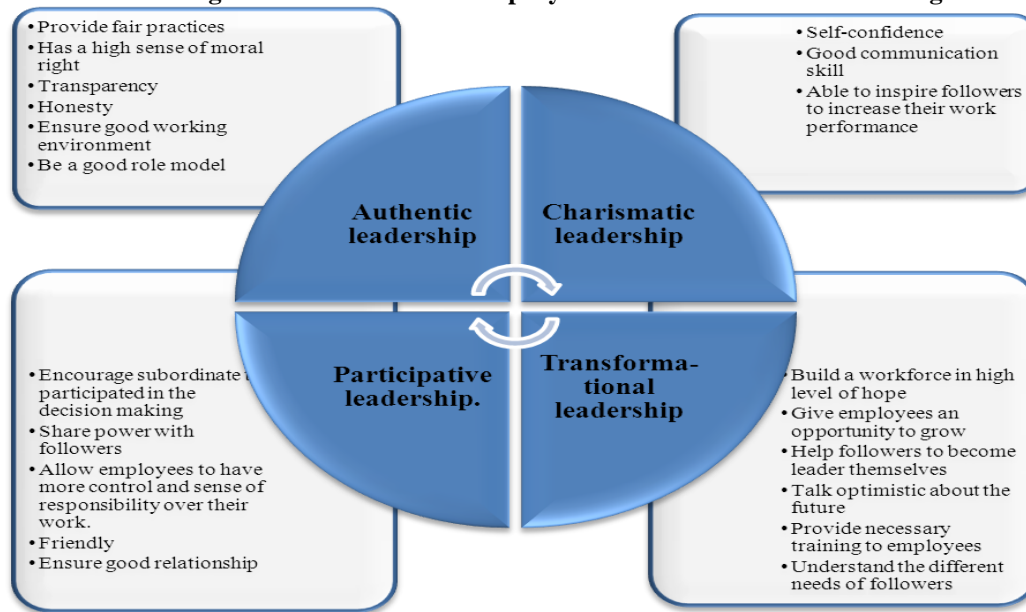
Transformational leadership is one of the most suitable leadership styles identified by respondents with regard to the Lao banking sector. The survey findings clearly showed that most employees expect to have leaders that are able to build a workforce, have a high level of hope and give them opportunities to grow, all of which is directly linked to the transformational leadership style. Transformational leadership also provides approaches that enhance effective leadership, because it emphasizes staff development and intrinsic motivation. According



the literature review, transformational leaders inspire their subordinates not just to follow them personally, but to help followers become leaders themselves (Adeniyi, 2010; Obolensky, 2010). Transformational leaders also have the ability to inspire followers to have a high level of performance by helping employees develop their potential by having an inspiring vision, by showing optimism about the future and by empowering their followers to make change happen. Employees who work for transformational leaders are more motivated, satisfied, and perform better in an organisation (Daft & Pirola-Merlo, 2009).

Charismatic leadership is another practical leadership style that meets the needs of employees. Leaders with charisma have a lot of self-confidence, good communication skills and are able to inspire followers to increase their work performance. It can be seen that these abilities are highly preferred by employees since the majority of the respondents pointed out that leaders should have the characteristic of self-confidence, and more than half of the respondents also commented that it is important for leaders to have effective communication skills. Charismatic leaders have a strong emotional impact on subordinates, because they apply both heart and mind to lead their subordinates. These characteristics can motivate people to have a higher commitment to work and inspire followers to deliver more than they would normally do (Daft & Pirola-Merlo, 2009).

**Figure 1: Practical leadership styles for leaders in the Lao banking sector**



Source: Developed by the researcher, Vongphanakhone (2014), adapted from David and Stanley (2013)

The final suitable leadership style that management teams in the Lao banking sector should apply is the participative leadership style. Participative leadership is a type of leadership style in which all members of a team take a more participative role in the decision making process. According to the survey findings, employees preferred their leaders to ask for their opinions and suggestions before making decisions. However, a very low number of employees participated in decision making at their level. Participative leaders allow employees to have more control and a sense of responsibility over their work and employees who work for participative leaders, will believe in their own abilities and have respect for others.

## RECOMMENDATIONS AND MANAGEMENT IMPLICATIONS

According to the findings, the leadership practices in Lao banks are not adequate for motivating employees to increase their work performances, and the leaders need to consider making significant improvements on some of their weaknesses. The following recommendations, which have management implications, are made.

- To increase the levels of employee empowerment in the Lao banking sector. Leaders should consider creating a work environment where employees are empowered and contributing to the success of the organisation by providing staff with more opportunities to contribute and share ideas in the decision making processes. This will allow employees to have more control and a sense of responsibility over their work. To engage the minds of employees, leaders should consistently communicate the vision and mission of the organisation and how employees can make positive contributions to the community.
- Leaders should provide the necessary training and coaching for employees in order to increase their ability and performance at work, and set clear work objectives and performance targets linked to customer outcomes.
- Leaders should provide fair practice to all employees and should have a high sense of what is morally right and wrong; be transparent and practise honesty and integrity at all times. Leaders can also improve their ethical practice by increasing positive modeling, self-awareness and self-regulation and being professionally transparent.
- Leaders should reconsider and develop better employment policies, because this is more likely to bring about employees' job satisfaction, which will lead to improved employee job performance.
- HR should provide leadership training for the top managers to improve their leadership knowledge, techniques and procedures as well as their people leadership skills (apart from the above mentioned management skills). Leaders should therefore receive extra training in interpersonal relations, leadership, problem solving, conflict management and coaching.
- Since leaders have a tendency to have a constant focus on goals, which can create stress amongst employees, it is imperative for senior management teams to have effective performance management skills, especially when managing stress levels in the workplace.
- Leaders should understand that money is not the most important factor which drives employees in the Lao banking sector to work. The three main factors which motivate employees to work are: Self-esteem needs fairness in the work place and opportunities for growth.
- Self-esteem needs is the most important factor that motivates employees to work. Leaders can increase employees' self-esteem by giving them recognition or acknowledgement for their achievement, such as promotions, awards and certificates of merit.

By paying attention to the above mentioned issues it is possible to enhance the productivity of the Lao banking sector and to have better human capital at its disposal in order to achieve the objectives of this emerging Asian market on the world's economic stage.

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# **CORPORATE GOVERNANCE PRACTICES AND CUSTOMER RETENTION NEXUS IN NIGERIA RETAIL BANKING SECTOR**

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## **ABSTRACT**

*In recent times, the banking sector in Nigeria has been going through reform processes as a means of revamping the overall financial system in the country. The array of shocks and uncertainties in the sector during this process led to a high incidence of interbank movement and switching by customers in search of reliable and sustainable involvement. Despite extant studies showing the fragility of banks as a result of the current situation, the extent to which nature and characteristics of bank governance structure determine banks' customer retention prowess remains an issue of scientific discourse. This paper relied mainly on secondary data and grey literature from relevant periodicals, journals and financial publications as sources of information utilised in the discourse. Specifically, this paper discusses relevant theories and typologies of corporate governance; reveals corporate governance practices and customer retention strategies in Nigeria retail bank; and the application of relationship marketing theory and concepts to Nigeria retail banking scenario. Among other issues it is evident from the discourse that both actual and perceived corporate governance practices and outlook of banks invariably influence their customer retention base.*

**Keywords:** Relationship marketing, Corporate governance, Customer retention, Banks, Customers

## **INTRODUCTION**

Within the last few years, the Nigerian banking industry, like its counterparts in Europe, America and Asia, has undergone significant changes through reforms necessitated by weaknesses exposed in the financial system. This poor state of the financial system has been attributed to a number of factors, one of which is the inadequate corporate governance structures within the banks (Avgouleas, 2009). The resultant effect of the reform policy introduced by government led to a significant reduction in the number of banks in operation arising from mergers, acquisition from bigger banks or outright liquidation. Although, this new dispensation aims to ensure a diversified, strong and reliable banking sector given the current levels of capitalisation required in the banks. However, Adekoya (2011) assert that despite the legal and regulatory frameworks instituted by government, there are still challenges to the corporate governance reform mechanism in Nigeria.

Apart from the intervention from government, another spin off of the chaos in the banking system was the diminished confidence by investors and banking customers. The period of bank distress brought hardship to depositors through denied access, partial or total loss of funds. For example it was reported as at the year 2009, that about 188 billion naira (approximately USD\$ 117 million) was trapped in the failed banks for four years EFINA (2009). This situation created panic amongst stakeholders demonstrated in the form of massive withdrawal of deposits and interbank switching in search of more reliable options. Empirical studies have highlighted the importance of managing and retaining customers (Kaur, 2012). Studies suggest that longer relationship with customers always have a positive impact on financial performance. Further, that customer loyalty can lower costs and/ or increase profitability. Garland (2002) studied the financial implications of customer retention and reveal that there is a strong relationship between customer loyalty and profitability in

retail banking. In line with this position, Ghazizadeh (2010) states that retaining customers is an effective and important tool that banks can use to gain a strategic advantage and survive in today's ever increasing competitive environment. Thus, the awareness of the benefits associated with maintaining long term relationships for sustainability of the organisation is evident from previous studies.

In services marketing literature, there has been prime focus on analysing factors that enhance relationship between the service firm and the customer (Colgate & Hedge, 2001). Extant literature reveal that the nature and extent of customer switching behaviour in the banking sector has not been passably studied (Kaur *et al.*, 2012). Bloemer *et al.* (2003) assert that within the banking context, the reasons are not so clear. Accordingly, the aim of this study is to construct an integrative framework linking corporate governance practices and customer retention in the retail banking industry on the basis of the relationship marketing theory. The proposed relationship model of these corporate governance practices on customer retention is illustrated in Figure 1 and discussed in the literature review subsections below.

## THEORETICAL FRAMEWORK

### Relationship Marketing Theory

Berry developed the relationship marketing theory in explaining the importance of enhancing customer relationships in marketing's task. His emphasis was that in a relationship view of marketing, it is implied that retention and development were of equal or even greater importance to the organisation in the long term than customer acquisition. This theory involves using event-driven tactics in customer retention marketing to reposition marketing as an on-going multi transactional relationship with customers (Berry, 1983). Thus, Taleghani *et al.* (2011) states that a key principle of relationship marketing is the retention of customers through various means and practices to ensure repeated trade from pre-existing customers by satisfying requirements above those of competing companies through a mutually beneficial relationship. The origin of the relationship marketing theory approach is considered to be in the business to business and services industry due to the special characteristics of these areas and the need for closer buyer-seller relationships. This theory rose to prominence particularly as a result of the spectacular growth of the services economy in many countries of the world which has favourably influenced the review of some marketing instruments in domains like banks, assurance, and tourism. The idea behind this theory is that customers have continuing value over the period they stay in business with a specific company. The theory therefore focuses on the life time value of a customer, which though is known to be a good idea, but has however been subject to criticism. Blythe (2009) contends that the focus on long term value of customers can lead, in some cases, to ignoring or devaluing customers who have a relatively short period of life remaining with the company, for instance older customers who have a relatively short period of life remaining in which to make purchases. In the course of doing this, a large and wealthy group can be bypassed entirely. The relationship marketing theory maintains that consumers enter into relationship exchanges with firms when they believe that the benefits derived from such relational exchanges exceed the cost. It has been put forth as a way for firms to develop mutually beneficial and valuable long-time relationships with customers (Ravald & Gronroos, 1996). The theory attempts to identify some of the benefits and costs that motivate consumers to enter into relational exchanges with firms. Some of these benefits include: the belief that a particular partner can be trusted to reliably, competently and non-opportunistically provided quality market offerings; the partnering firm shares values with the consumer; the customer experiences decreases in search costs; the exchange allows for customisation that results in better satisfying the customer's needs, wants, tastes, and preferences. Some of the costs include the premature exclusion of market offerings from other firms that might potentially be superior; the monetary and time costs of co-production, the decreased prices that might result from accepting standardised market offerings; and the increased potential vulnerability of the consumer to the partner's opportunistic behaviour. On the other hand, from the perspective of why firms enter into relationship with consumers, the explanation based on this theory is to enable firms to compete. According to Gummeson (2002), the fundamental imperative of relationship marketing strategy is to achieve competitive advantage and superior financial performance, firms should identify, develop, and nurture a relationship portfolio. In terms of this theory, competitive advantage is posited to promote superior financial performance. This is because relationship marketing (RM) based strategies allow firms access to needed resources that allow them to offer more retail banking services. Walsh *et al.* (2004) define relationship marketing as "the activities

carried out by banks in order to attract, interact with, and retain more profitable or high net-worth customers.” This set of customers are considered valuable not only because of what they buy, but because of the referrals they make, boosting of staff morale because of their positive interactions and feedback in addition to enhancing the image of the business because of their activities and role in the community. Thus, Leverin & Liljander (2006) state that relationship marketing aims at increasing customer profitability while providing better services for customers. However, Ismail (2009) observes that most of the studies have been emphasizing the effect of relationship marketing on organization performance neglecting customer benefits. According to him, relationship marketing emphasizes that long-term relationships are mutually beneficial. In any genuine relationship, both parties involved should be beneficiaries of the outcome of such relationship.

Empirical studies on relationship marketing have examined various factors that impact on customer retention, namely, customer satisfaction, service quality, and customer perceptions of value, corporate image, changing barriers, trust, commitment and loyalty (Ghazizadeh et al., 2010; Kaur et al., 2012). However, most of these studies have been silent on other firm-level characteristics such as corporate governance practices which may impair the firm-customer relationship.

## **RESEARCH METHODOLOGY**

### **Documentary Study**

Secondary data was collected from a review of previous studies, texts, articles and journals from researchers and other sources. Also, annual reports of the banks, other public documents and research reports from the Central bank, Nigerian Deposit Insurance Corporation (NDIC) and the Nigerian Stock Exchange were referred to and analyzed. In addition guidelines from the Code of Corporate Governance form the basis of selection of the variables. This was done with a view to assess the perceptions of customers on the issues of corporate governance, sustainability of the banks in the period of study, the variability in customer base, the extent of transparency and disclosure in annual reports, composition of the board members of the bank and also examine the other variables pertaining to this study.

## **BACKGROUND LITERATURE**

### **Bank Corporate Governance**

Bank governance has been the topic of much recent academic work (Ellul & Yerramilli, 2010). There are many definitions of corporate governance given in literature. The Organisation for Economic Cooperation and Development defines corporate governance as “the structure through which company objectives are set and the means of attaining those objectives and monitoring performance (OECD, 1999). It is also defined as a process by which corporations are governed and controlled with a view to increasing shareholders’ values and meeting the expectations of other stakeholders (CBN, 2006; Inyang, 2009). Another definition of corporate governance is stated as “the manner in which companies are controlled and in which those responsible for the direction of companies are accountable to the stakeholders of these companies”. For shareholders it can provide increased confidence of an equitable return on their investment. For company stakeholders it can provide an assurance that the company manages its impact on society and the environment in a responsible manner. However, from banks’ perspectives, it is argued that the shareholders actually provide a very insignificant part of the bank’s assets and funds. Rather, majority of its investments are financed by the depositors’ funds. As a result, the risks of losing depositors’ savings demand stern priority in protection of depositors. This position necessitates the broader view of corporate governance that advocates that the interest and benefits of the suppliers of funds for a firm must be maintained in a consistent manner (Macey & O’Hara, 2001). It also fosters the development of the stakeholder theory that views corporate governance more than simply the relationship between the firm and its capital providers but that it also implicates how the various constituencies that defined the entity serve, and are served by the corporation (Mintz, undated). Empirical evidence suggests that a link exists between corporate governance practices and firm performance.

Despite the presence of these other stakeholders, generally shareholders control the firm. Evidence shows that both the boards and the compensation package for CEOs represent the shareholders' preference for increasing risks. Consequently, the board represents solely the views of shareholders, subject to regulatory constraints. It is argued that shareholders' interests may diverge substantially from those of other stakeholders, especially on risk, where shareholders prefer volatility and may have short-term perspectives. In their model, Bolton et al. (2011), demonstrate that shareholders may not have the incentive to reduce risk taking at a firm, even if it is in their own interest due to commitment problems (Mehran, 1995). Existing literature on bank's corporate governance has focused on many themes which include the effects of board composition and performance; effects of board characteristics (diversity, external ties, etc.) on the firm's competitiveness and performance. Other studies investigated the effect of board size, experience of the director and their other activities on performance (Mehran, 1995). The performance measures varied from profit margins, expected stock returns, firm valuation to market valuation (Black *et al.*, 2006). The identification of variables for this study are obtained from analysis of the Nigerian Code of Corporate Governance (2006) and from previous studies on corporate governance. As the focus of this paper is on customer retention, three main corporate governance indicators were identified to be relevant to this study.

## **Integrity of Leadership**

Empirical studies highlight the notion that corporate governance has a leadership dimension, because it provides directional leadership to organizations by creating an enabling environment which integrates and systematizes various collaborative efforts for setting objectives and achieving corporate goals (Ugoji & Isele, 2009). Boards of directors represent leadership of any organisation and consequently are vested with the ultimate internal authority within a company (Renton, 1994). Okafor (2003) observe that without a leader's control, workers may have little direction, and lack of control will result in inefficiency particularly where workers lack self-discipline. Studies have shown that "firms with leadership depth were much more profitable than those without it". Literature indicates that "effective leadership exerts influence in a way that achieves organizational goals by enhancing the productivity, innovation, satisfaction, and commitment of the workforce." On the other hand, the effect of weak leadership in a profit-making organisation is business failure (Oloyede & Adeyeye, 2006). Integrity as an attribute of leadership generates trust from stakeholders. It reveals the truth about a corporation. Integrity is defined as adherence to moral and ethical principles. It is stated that integrity is a continuous and ongoing process that must be monitored, maintained and nurtured. According to Nnabuike (2010), leaders, and by extension, board members, have the crucial responsibility of ensuring that their institutions are ethically guided. Studies show that organizations that emphasize ethical practice are more likely to build confidence in customers about their products and services for enhanced patronage than organizations that have little or no regard for it. In corporate governance literature, different reasons have been identified for unethical practices in organisations. It is posited that people with strong economic values are more likely to behave unethically than those with weaker economic values.

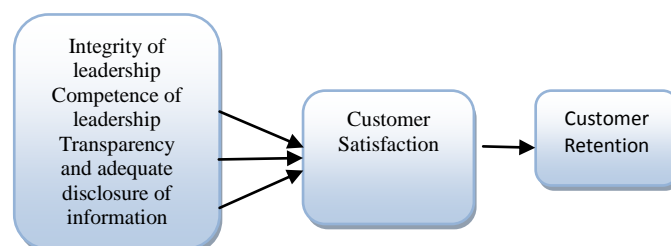
Corporate governance literature suggests that people with a high need for personal power might be prone to make unethical decisions, using this to further self-interest rather than for the good of the organization as a whole. Another reason enunciated for unethical practice is a lack of formal education of the organizational workforce about the benefits of ethical values and the negative effects of unethical practice on the organization in terms of loss of good image/reputation and that of low patronage from customers. From the foregoing, it can be deduced that the higher customers' perceived level of integrity in leadership, the higher their satisfaction level which will positively influence customer retention.

## **Competence of Leadership**

Given the opacity and complexity that characterise financial institutions, it has become pertinent for board of directors to understand the inner workings of the bank in order to discharge their functions effectively. Studies indicate that many boards are now facing enormous challenges in dealing with their global business and operating in diverse governance and cultural situations. According to Mehran (1995), this difficulty stems from a number of reasons. First, the simple number of activities to manage has multiplied. Second, the knowledge needed to understand these activities has also increased substantially. Third, techniques used to manage these

activities (such as value at risk in the case of risk management and credit ratings for capital requirements) have not performed well under the greater degree of complexity and duress. To validate the need for knowledge of board members, Olayiwola (2009) assert that the reforms in the Nigerian banking sector failed in the area of not equipping the leadership of the newly constituted mega banks with new skill and techniques required to manage the business. Also, the failure of financial institutions is associated to the board's lack of understanding in financial matters.

**Figure 1: Influencers of customer retention from corporate governance perspective**



Further, the rapid advances in information technology and the globalisation of economies have presented potent challenges for boards. It has changed the functions of boards such that they now face situations they never faced before. Banks (2004) argued that if boards are unaware of the impact of technology development, especially concerning the technical aspects of business, they are unable to query or challenge company management effectively.

Hence corporate governance codes include the provision for directors to be knowledgeable in business and financial matters and also possess the requisite experience (CBN, 2006). However, studies show that the level and extent of board experience and expertise has yielded mixed result. While evidence indicate that lack of financial experience of board members in German banks was strongly positively related to losses by the banks, others contend that the nonfinancial experts are the individuals that may ask the important, high-level strategic questions. Guerrera and Larsen (2008) state also that board expertise may be further alignment to risk-taking incentives. Notwithstanding this difference in results, it appears stakeholders, given the recent crisis in the banking industry, gain comfort in the knowledge that board members have the requisite skills and qualifications to perform their duties and functions. From the foregoing, it can be deduced that the higher the perceived level of leadership competence, the higher the level of customer satisfaction which positively influence customer retention.

## Transparency and Adequate Disclosure of Information

Transparency and disclosure of information are key attributes of good corporate governance which banks must cultivate with new zeal so as to provide stakeholders with the necessary information to judge whether their interest are being taken care of. Transparency entails revealing as much information about operations and activities that will enable the stakeholders not only to know the basic facts and figures, but also about the mechanisms and processes in the corporation. One of the contributory factors identified in literature for lack of transparency amongst financial institutions is the practice of financial innovation. Lui (2013) asserts that financial innovation decreases transparency through complicated products and confidentiality of transactions. The board of directors, in addition to its other duties, is responsible for the preparation of accurate financial reports (Dabor & Adeyemi, (2009). Empirical evidence indicate that there are benefits to be gained when a company discloses information on its operations and performance beyond those specified by regulation. For example, during Standard and Poor's review of US companies' annual reports, it was indicated that US companies exercised considerable discretion regarding what was disclosed in annual reports compared with other forms of regulatory or voluntary disclosures. Their transparency and disclosure rankings based on annual reports were negatively correlated to systematic risks. These correlations suggest that the market pays a premium for companies that provide more information in their annual reports than was required by regulation. Shareholders and other stakeholders rely on information disclosed in annual reports in order to ascertain whether their interests



are being taken care of. Evidence from the banking sector indicate that there are many deficiencies in the information disclosed, particularly in the area of risk management strategies, risk concentration, performance measures and other related areas (CBN, 2006). From the foregoing, it can be deduced that the higher the level of transparency and disclosure, the higher the level of customer satisfaction which positively influence customer retention.

## MANAGERIAL IMPLICATIONS

With the recent move by organisations towards a customer-centric approach as a result of the recognised associated benefits, managers as well as the board of directors have to ensure the implementation of effective corporate governance practices in their organisations. Firms with weak corporate governance will find it difficult to retain customers, raise capital and attract foreign investors especially in light of the recent scandal and collapse of banking institutions. In order to fulfil their roles in ensuring sustainability and securing a competitive advantage for their firms, key aspects of corporate governance as perceived by customers to be protecting their interests, namely, integrity of leadership, competence, transparency and adequacy of information disclosure have to be actively incorporated in their business practices.

## CONCLUSION

The proposed model for customer retention shown in Figure 1 is supported by literature from studies on corporate governance. The variables examined were selected based on banking customers' knowledge and perception of corporate governance practices that influence their decision to remain or to switch to a more reliable bank. As this model suggests, to enhance customer retention, the relevant dimensions of corporate governance, namely, integrity of leadership, competence of leadership with transparency and disclosure of information must be improved. This study is timely and significant to the banking sector, given the spate of recent failures attributed to weaknesses in corporate governance mechanism and the attendant set back and losses suffered by stakeholders amongst which are the often neglected banking customers. The model proposed will contribute to the body of knowledge in corporate governance and relationship marketing and educate bank management and the board on how customer base can be influenced by corporate governance practices within their organisation. This study can serve to further develop the body of knowledge on successful customer-retention schemes in the banking sector and should motivate more comprehensive research in the area.

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# IMPLEMENTING ETHICS AND PREVENTION OF CORRUPTION AT MANAGEMENT AND LEADERSHIP LEVELS OF ORGANISATIONS

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## ABSTRACT

*Corruption and corrupt practices among leaders and managers in business and work organisations is recognized as a global phenomenon, which leaves out no specific area or location of businesses. Through secondary data sources analysis, the above concern became a motivation for this paper. This discourse presents various dimensions of corruption as a social problem, and ethical considerations as the cornerstone for achieving business and service delivery objectives in organizations. The paper further interrogated sources of corruption in organizations and the western orientation and liberal African perspective which are the two main versions in understanding corruption with different interpretations from contextual point of view. Against the background of forms and manifestations of corruption and corrupt practices, this paper articulates from gray literature a range of specific modalities, which include effective whistle blower protection law, ethics audit and training of management cadre, and unspecific and broad based measures such as integrity testing, regulatory reforms, establishment of anti-corruption charter and laws among others in control of corruption among managers and leaders. The challenges of dealing with corruption at management level were also holistically highlighted in this discourse. The paper concludes from observation that most corporations and agencies devote lots of energy and resources in fighting corruption. Irrespective of the implications of anti-corruption exercise in terms of material inputs, implementation of ethics and non-compromising stance on business standards still remain the panacea for prevention and control of corruption among leaders and managers in organisations.*

**Keywords:** Social problem, corruption, ethical principles, organization, managers

## INTRODUCTION

Corruption is defined as the “misuse of entrusted power for private gain” and represents a critical business issue for corporations and a significant social issue around the world. Corruption costs an estimated \$2.6 trillion globally in bribes, inflated project budgets, and legal and other expenses. It also undermines public trust and steals resources from developing countries that badly need the funds to address poverty and other social problems. As the typical source of bribes, corporations are a significant part of the problem and could benefit measurably from progress toward solutions — particularly in terms of reduced costs, greater operational efficiency, and improved reputation. Therefore, the anti-corruption field offers a major opportunity for strategic corporate social responsibility (CSR) programs to tackle an issue that is inherently linked with both corporate and societal interests (Hills et al 2009: 6). From a more definite and African point of view, Otite (1986:12) understands the phenomenon of corruption as the perversion of integrity or state of affairs through bribery, favour or moral depravity when at least two parties interacted to change the structure or processes of society or the behaviour of functionaries in order to provide dishonest, unfaithful defiled situations,... it involves the injection of additional but improper transactions aimed at changing the normal course of events and altering judgments and position of events. Corruption is not a peripheral social concern that corporations can ignore or passively address. It is a bottom-line business issue that directly affects companies’ ability to compete. Widespread in emerging markets, corruption is becoming an increasingly important issue for business to address. Furthermore, it cheats disadvantaged populations by diverting resources for critical services like education, clean water, and health care into the pockets of dishonest government officials. For decades, donors and nonprofits

have targeted corruption, but with limited evidence of progress. Corporations have largely focused on “getting their own house in order” through ethics and compliance programs, as well as recently established collective action initiatives. With few exceptions, however, corporations have not committed to more proactive efforts aimed at comprehensive solutions to the problem (Hills et al 2009:2). Patterns of corruption vary from society to society and over time. This is particularly the case when we consider the “South”, the “Third World” or the developing countries. In order to understand the immense diversity of its origins, forms and effects across developing countries, we should examine the roles of both the internal 'stakeholders' in developing societies (such as politicians, business cliques and junior civil servants) as well as external actors (including western multinational companies and international financial institutions). As a result of this variety in patterns of corruption, there are problems in evaluating the current diversity of corruption and anti-corruption efforts; many advocate a single universal strategy to fight corruption (Doig and Riley 1998). A number of issues need to be addressed to understand corruption. Seeking to identify generic causes or patterns of corruption within any single or specific developmental timescale, and within state activities, or without reference to related issues, is both comparatively complex and methodologically fragile. Although corruption itself is an age-old phenomenon with numerous proposed remedies (Noonan, 1984; Sen, 1997), there has been increasing attention given by academic and policy-oriented studies to the definition, origins, character and costs of corruption in developing countries since the 1960s. Corruption has often been a focus of inquiry in its own right, because it involves the undermining of public office for private gain, but also because it is intricately linked to other forms of lawlessness and maladministration, including fraud and organised crime. Its prevalence and longevity are a matter of concern for its damaging public and social consequences: it undermines the development capacities of states and distorts priorities

## METHODS AND SOURCES OF DATA

This paper relied mainly on the secondary sources of information. In other words no empirical fieldwork aimed at data collection was carried out in the process of generating data. Although, the researchers informed knowledge and guesses (*emic perspective*) about the subject matter and the areas of coverage represents a veritable source of information. Secondary data utilized for this discourse include gray literature, government gazettes, publications and periodicals, Newspapers and text books. Data extracted from these sources were sorted through content analysis in a manner that they became useful in the write-up of this paper.

## CORRUPTION IN BUSINESS ORGANISATIONS AND GOVERNMENT ENTITIES

### Ethical considerations in work organisations

Operational and guiding codes of conduct in every organisation are derived from written documents and unwritten sources. While the written sources include organizational code of conduct, standard labour laws and statutes and constitutional provisions, the unwritten aspects locate in the verbal organizational values, norms and expectations, conventional moral values outside the organisation and individual or group belief systems, which set standards for behaviours. Ethics in any public or private sector organization ought to focus on what is right and proper behaviour of all public officials and political office holders. This includes being just and fair since these are the expectations by society from any rational bureaucracy (Makinde 2003). In every service delivery organization the cornerstone and yardstick that determines conformity to ethical standards is the extent to which officials, especially the managers and leaders align with the following universal objects as follows: ***Serving the Public Interest***; Civil servants and public officials are expected to maintain and strengthen the public's trust and confidence in government, by demonstrating the highest standards of professional competence, efficiency and effectiveness, upholding the Constitution and the laws, and seeking to advance the public good at all times. ***Transparency***; Civil servants and public officials are expected to use powers and resources for public good, under government policy. They should be accountable for the decisions they make, and prepared to justify their actions. ***Integrity***; Civil servants and public officials are expected to make decisions and act solely in the public interest, without consideration of their private interests. Public employment being a public trust, the improper use of a public service position for private advantage is regarded as a serious breach of duty. ***Legitimacy***; Civil

servants and public officials are required to administer the laws, and to exercise administrative power on behalf of the Government, or the Parliament, or other such authority. That power and authority should be exercised legitimately, impartially and without fear or favour, for its proper public purpose as determined by the Parliament or their employer. **Fairness**; Civil servants and public officials should make decisions and act in a fair and equitable manner, without bias or prejudice, taking into account only the merits of the matter, and respecting the rights of affected citizens. **Responsiveness**; As agents and employees of the elected Government, Civil servants and public officials are required to serve the legitimate interests and needs of the Government, other civil servants, and all citizens, in a timely manner, with care, respect and courtesy. **Efficiency and Effectiveness**; Civil servants and public officials are required to obtain best value for public assets deployed in or through public management, and to avoid waste and extravagance in expenditure and the use of public assets.

## Forms of Corrupt Practices by Leaders and Managers in Organisations

Corruption is also infinitely varied in its character in regimes, institutions and groups across developing economies and is often subject to differing approaches and attention depending on its political significance or its societal impact; for example, 'grand' or high-level corruption versus low-level corruption; judicial, administrative and legislative corruption; or corruption in various public services. Incidental corruption is a feature of life in almost all societies, but it can be systematic in many public institutions in developing countries, if not systemic in society as a whole (Riley, 1983), and it can be both endemic and planned. In many country cases, a key source of corruption may be a self-serving political leadership and a large, inefficient and politically influenced and misdirected state framework within which individual and group private interests have priority over the collective good. Lame and Odekunle (2000:3) in Ezeani (2003) listed embezzlement, abuse of office, gratification, nepotism, advanced fee fraud as manifestations of corrupt practices by most leaders and managers in public and private organisations, namely - *Embezzlement*: Fraudulent appropriation of entrusted property or financial resources. *Abuse of Office*: Wrongly taking advantage of one's position of office for private gain. *Gratification*: This is usually tangible or intangible item given to gain favour, reward and recompense and in most cases a bribe. *Nepotism*: This entails showing special favour to relations, friends or others in conferring privileges or position. It is usually a sort of favouritism based on primordial considerations.

## Understanding the magnitude of Corruption (Corrupt practices by officers of different level)

There various versions in understanding the concept of corruption. First is from western orientation, while the second is from more liberal African perspective of definition of corruption. It is apparent that the two conceptualizations mean different things in their proper interpretation of situations and contexts. From whichever perspective, sources of corruption in work places or organisations can be internal or external and in some cases a combination of both which manifest in a mutual arrangement.

A growing number of executives are recognizing that their companies are vulnerable to the effects of corruption. In a 2007 survey, senior executives reported that corruption was a top-of-mind business issue. Almost two-thirds of executives have experienced some form of corruption. Nearly half have turned down a market opportunity due to corruption risks. Two out of five executives have lost a bid because of corrupt officials. Two out of five executives also claimed that their competitors pay bribes. Senior executives also are becoming increasingly interested in addressing the negative effects of corruption. More than 70 percent believed that a better understanding of corruption would help their companies "compete more effectively, make better decisions, improve corporate social responsibility, and enter new markets." In addition, two-thirds of respondents believed that a level playing field is critical to their companies' future business success. Corruption is estimated to cost \$2.6 trillion annually, an amount equal to more than 5 percent of global GDP. Each year, over \$1 trillion is paid in bribes; not only do these payments undermine fair competition and affect the profitability of businesses operating globally, but they also divert crucial public resources away from their legitimate uses, denying citizens essential public services such as education, clean water, and health care.

## The Business Imperative Costs to Business

Corruption poses a real business threat to corporations operating in the developing world. Executives have always been concerned about negative PR from corruption, but they are increasingly becoming aware of the additional costs and risks they face, including: *Operational costs*, Corruption add additional expense throughout the corporate value chain and can lead to costly operational disruptions. Current studies suggest that corruption adds more than 10 percent to the cost of doing business in many countries, and that moving business from a country with low levels of corruption to a country with medium to high levels is equivalent to a 20 percent tax; *Legal risks*. Corporations face substantial consequences if they engage in corrupt business conduct, including large fines and disqualification from future government procurement. *Competitive risks*, Companies can also be at a competitive disadvantage if they refuse to pay bribes. Companies that adhere to strict principles against corruption can find themselves losing business to less ethical competitors who are willing to pay to influence the procurement process. This may leads to what is referred to as ‘learning from costly mistake’ ((Hills et al 2009:11).

## The Social Imperatives and cost

In addition to having tangible business consequences, corruption exacts significant costs on society. Redirecting large sums of money contributes to increased poverty and income inequality and discourages foreign direct investment in poor countries where it is needed most. The effects include: Reduced government services, particularly for the disadvantaged. Studies indicate that in some countries corruption adds as much as 25 percent to the cost of public procurement. 16 This diversion of resources results in lower quality services, which also become more expensive and often unaffordable for the poorest citizens; Constraints on foreign direct investment. Investors typically avoid environments in which corruption increases the cost of business and undermines the rule of law.17 As Bono, a board member of Debt AIDS Trade Africa explains, “The single biggest obstacle to business and the renewal of the economies in the South is corruption and the single biggest obstacle to getting start-up money for those businesses, if you want to look at aid as investment, is corruption.” Decreased trust in government. In societies where bribery persists and corrupt officials are not held accountable, citizens lose faith in their government. A lack of public trust undermines the rule of law, which can lead to increased crime, reduced safety, and further instability.

## CORRUPTION AS VIOLATION OF ORGANIZATIONAL CODE OF CONDUCT

The code of every organisation has Internal (in companies) and external purposes. Internally it creates awareness about best practice ethical business conduct, ensures that all private companies conduct business in a responsible and ethical way and discourage unethical business conduct. Externally, it improves the reputation of the overall economy internationally to attract more foreign investment and reduces the level of corruption in the country. In most instances the chances of corruption and corrupt practices occurring in business organizations, cooperate bodies and even government owned business entities is a function of level of commitment of such organisations to the code of ethics. The level of commitment of companies to the code of ethics can vary from a light commitment to a serious commitment. Three levels of commitment are described in the table below. Each level of commitment comes with requirements of what it would mean for the company and what it should do to live up to that level of commitment to the common code. A company can, voluntarily, choose one of the options below (Box 2), or it can opt for a lower category commitment initially and then over time progress to a higher category of commitment.

### Box 2: Level of Commitment to Code of Ethics

#### Category 1: ADOPT the code by signing up

The company will adopt the code by signing a document see (example attached) where they indicate their commitment to the code

- Company will adhere to the code
- Company will avoid unethical behaviour
- Company will become a member of the anti-corruption initiative
- Company will attend seminars and workshops from the anti-corruption initiative
- Company will visibly promote responsible business conduct and convince other companies to also sign up to the code

### **Category 2: INTEGRATE the code**

The company will adopt the code and will start (or continue) with an ethics and anti-corruption management programme within the company.

- Company will support, adopt and integrate the standards as set out in the code within the company (or ensure that principles of the common code are reflected in the company's own code)

- Company will develop an internal ethics programme to manage ethics and good governance in the company (risk assessment, top level commitment, policies and procedures, effective implementation, training, awareness and monitoring and review)

- Company will appoint an 'ethics champion' who will promote ethics within the company

- Company will report publicly on its progress regarding the integration of ethics within the company

- Company will attend seminars and workshops from the anti-corruption initiative and will convince other companies to do the same

- Company will clearly and visibly promote responsible business conduct and convince other companies to also sign up to the code

### **Category 3: INTEGRATION, REPORTING and EXTERNAL ASSESSMENT**

- Company will do everything as set out in category 3

- Company will allow an external assessment of its internal ethics management function and ethics programme. Such an audit assesses where the status of ethics management in the company is and identifies its ethics risks. It is not an investigation into unethical conduct. The outcome of the audit would be advisory with no punitive measures.

Source: Fédération des Entreprises du Congo (2010)

Bearing in mind the significant progress made in recent years in developing effective Civil Service Ethics, Codes of Conduct, transparency measures, Ethics and Integrity systems, and Anti-corruption agencies, there is now a need to concentrate on three areas of concern in particular, which are directly relevant to the problems of internalizing integrity and Ethics in democratic governments and the Civil Service. Ethical commitment in organisations can be furthered through the following means: *Anticipating specific threats to ethics standards and integrity in the public sector*; In this case, attention needs to be paid to systemic threats that could weaken adherence to core public sector ethics values, and commitment to good governance, and to preparing the necessary political and management responses; *Strengthening the ethical competence of civil servants, and strengthening mechanisms to support "professional ethics"*; This requires that new techniques need to be undertaken to institutionalize ethically competent decision-making, disinterested advice to Government, and, ultimately, an 'ethical culture' which supports professional responsibility, self-discipline, and support for the rule of law ; *Developing administrative practices and processes which promote ethical values and integrity*; Importantly, new and proposed pro-ethics laws require effective implementation through, for example, effective performance management techniques which support the entrenchment of the ethical values set out in Civil Service (and parastatal) Codes of Ethics.

## **PREVENTION OF CORRUPT PRACTICES PERPETRATED BY MANAGERS AND LEADERS**

*Development of Charters of Service as Ethics Standards*; Charters will also make Corruption and other forms of misconduct by officials easier to detect and correct, by making it easier to identify specific cases of poor performance, administrative obstruction, maladministration, and improper use of discretion in administrative decision making. Charters of service-delivery developed by civil service agencies and parastatal increasingly



emphasize service and accountability - the main aspects of civil service reform - and in so doing support a number of fundamental ethical principles and specific attitudes and practices such as service, accountability and complaints. In particular, Service Charters usually require specific standards to be set covering government or managerial service-delivery, but they may also be used to set and enforce standards of Ethical conduct (by prohibiting bribe-seeking), Departmental accountability (by providing redress for complaints), and Procedural fairness (by requiring 'due process' and rule of law in decision making).

***Specific Laws against 'Maladministration';*** 'Maladministration' refers to the making of an official decision in a manner which is contrary to law, arbitrary, unreasonable, without proper justification, lacking in procedural fairness, or made without due consideration of the merits of the matter, or made corruptly. In one respect at least, Maladministration may be no more than simple incompetence. The other aspects of Maladministration, however, shade into 'Abuse of Office' - misusing public office for private gain - which is the standard definition of Corruption. In either case, Maladministration by a public official is thus inherently unethical. An 'official decision' means any decision made or purportedly made under a law or government policy, or an administrative procedure of a public body, by a civil servant or public official. In many countries, official decisions affected by 'Maladministration' may be reviewed independently, (for example by an Ombudsman, Administrative Appeals Tribunal or Court), and corrected. Officials responsible for maladministration may also be disciplined by their employer.

***Establishment of Anti-Corruption Laws and Agencies;*** In addition to establishing anti-corruption agencies, under laws which protect the public for reporting corruption many countries have also established, and enforce, a higher duty on civil servants and public officials for mandatory reporting of all instances of suspected corruption and official misconduct, including significant breaches of the body's code of ethics. Failure to report known or reasonably suspected cases may be used as the grounds for disciplinary measures to be taken against civil servants.

***Right to Obtain Access to Official Information;*** Some governments provide citizens with a qualified right of access to any official information held by government agencies, civil servants, public officials and public bodies, usually under a 'Freedom of Information' law. The right of access generally does not operate where the responsible minister determines that disclosure of part or all of the official information sought by a person, or the disclosure of the existence of such information, would be likely to compromise the national interest, the economy, an investigation of a criminal matter, or national security, or would otherwise not be in the public interest.

***Right to Obtain Reasons for Official Decisions;*** In some countries, citizens have an unqualified right, under law, to be advised of the reasons for any official decision of which they are directly the subject. This includes the right to be advised, at the time of the decision and in writing, of the evidence and other information taken into account by the decision maker, and of the procedure, if any, for having the decision reviewed. This provision is seen as potentially a major contribution to the integrity and probity of official decision making, good governance, and the prevention and detection of corruption. The international 'best practice' examples of providing rights to reasons for official decisions are to be found in Britain, USA, Canada, Australia, New Zealand some other OECD countries.

***Right of Review of Official Decisions;*** In the interests of improved transparency and accountability, and recognising citizens rights to both substantive and procedural fairness, a number of countries have enacted laws which provide that a person who is adversely and directly affected by an official decision has a right to have the decision reviewed by an independent decision maker, who may make a fresh decision, or return the matter for reconsideration by the original decision maker. All significant official decisions can be made subject to independent review, and effective administrative procedures (in particular the keeping of proper records), can be required to be maintained, so as to assist effective independent review. Normally it is expected that an independent review would be conducted internally, but in more significant matters, or where effective independent review is not available internally, external review by another person or body (for example, an Ombudsman, or a Court) may be provided for by law.

***Right of Protected Disclosure of Official Wrongdoing ('Whistleblower' Protection);*** In the interests of improving accountability and fostering the fight against corruption, some countries have passed laws to establish

a right whereby a person may make a protected ‘public interest disclosure’ of any suspected or actual corruption, misconduct, or Maladministration by a civil servant or public official. The main task of “whistleblower” protection provisions such as this is to maintain a reasonable and workable balance between encouraging the desirable disclosure of official wrongdoing, (by protecting those who make disclosures against acts of reprisal or revenge). At the same time such laws protect the reputations of innocent individuals and government organisations (by providing significant penalties for knowingly false or malicious ‘disclosures’). A disclosure will only be protected if it is made to a proper authority, and if the disclosure is based on an honest belief, held on reasonable grounds, that the disclosure is true. A person making a public interest disclosure in these terms has the right to be protected from reprisal in relation to the making of that disclosure.

***Public Finance management reforms;*** Many countries have traditionally adopted stringent statutory controls on the management and expenditure of public finances, in an effort to control public expenditure and to minimize corruption, waste and inefficiency. Most such measures are overseen by an independent Auditor General, who is usually an officer of the Parliament, rather than a civil service office. Increasingly, Parliaments have adopted Public Accounts Committees to add to the oversight of Governments and their budgets. More recent approaches have emphasized the need to ensure ‘value for money’ (‘VFM’) management and control strategies to ensure that public monies are controlled in such a way as to maximize the benefit to the Government and the public, and that expenditure controls are not unduly expensive to administer.

***Regulatory Reform;*** The elimination of unnecessary administrative ‘red tape’ – discretionary bureaucratic decision making of little or no added value – is endorsed by OECD countries as potentially making a significant contribution to reducing the cost of government (by reducing the size of the public administration machinery), and the compliance costs to the community. Perhaps more important, however, is the contribution that reduction of administrative controls may make to controlling corruption, by reducing the number of administrative opportunities for bureaucrats to extract bribes and ‘facilitation payments’, or subvert the process outright by ‘losing’ the file.

***Establishment of integrity Testing Mechanisms;*** Integrity tests are one measure for encouraging the observance of an organisation’s Code of Ethics / Code of Conduct. Integrity testing is generally employed by the employee’s agency or an anti-corruption body, to detect individuals who are prepared to accept a bribe, or other inducement, to act corruptly by doing (or not doing) something that they are required to do in their position. To be acceptable and credible, and fair, the ‘test’ set must be realistic, in that it must reflect the circumstances of the officer’s position in relation to his or her responsibilities, and be carried out in such a way that the test does not amount to ‘entrapment’. This process is to be subject to independent review in every case, to prevent abuse of the power to impose a penalty.

***Extending Ethics and Anti-Corruption beyond:*** Ethical conduct and corruption in the public sector are the two sides of the one coin. To the extent that an organisation succeeds in enhancing its own ethical climate internally, and that which it operates in externally, (for example, by including suppliers and contractors within the scope of an ethics program), it reduces the acceptability of corruption. Conversely, control opportunities for corruption and you make room for ethical practices to become established.

## CONCLUSION

We envision a world in which corporations become leaders in fighting corruption. To reach that goal, there is an urgent need for cooperation to ensure compliance with ethical principles by investing significantly in ethics and compliance programs to maintain or increase their level of integrity throughout all divisions and countries. Strengthen collective action, which requires a need to shift from broad-based, diffuse declarations to more outcome-oriented pacts that can create effective incentives for members to change behaviour. Fighting corruption and corrupt practices from the lower level staff members to the top management cadre is achievable only when private and public sector organisations invest required strategies. The Corporations possess unique and powerful strengths in the fight against corruption, including communications power from the corporate brand, economic leverage, technical expertise, and cash resources for grant making.

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# **AN INVESTIGATION OF SOUTH AFRICAN SECONDARY SCHOOL STUDENTS' LEVEL OF KNOWLEDGE ABOUT ENVIRONMENTAL POLLUTION: A COMPARATIVE STUDY**

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## **ABSTRACT**

*This study investigated the levels of knowledge of secondary school students about environmental pollution from two South African provinces. In South Africa, little or no studies have been investigated in this area. This study therefore compared the levels of knowledge of students living in diverse environmental conditions. This was done with reference to their demographic variables (gender and school type). Participants were 753 male and female students in Grades 8 to 12 from two Provinces in South Africa (Mpumalanga and Gauteng Provinces). There were 423 from the Mpumalanga province and 330 from Gauteng province. Their ages ranged from 13 years to 23 years ( $M = 16.1$ ;  $SD = 1.75$ ). They responded to a 12 - item Questionnaire on issues relating to environmental pollution. Data were analysed by computing descriptive statistics along with unpaired t-tests. Statistically significant differences were reported between students from a coal mining province (Mpumalanga) and those from a non-coal mining province (Gauteng). With regards to sources of environmental information, students from both provinces rated newspapers as their most important.*

**Keywords:** Environmental pollution, South Africa, Secondary school students

## **INTRODUCTION**

Over the past ages, our world environment has been threatened by lots of problems. One of such problems is environmental pollution. Environmental pollution has been a major problem throughout the world since the origination of industrialisation which has resulted in population growth and increased urbanization. This environmental pollution is persistently and adversely affecting the quality of air, water supplies, plant and animal species and human beings. The problems caused by pollutants released from industries have resulted in problems such as climate change, global warming and acid rain all over the world. People living around industries are reported to be more vulnerable to the effects of whatever pollutants are released (Briggs, 2003). Fossil fuel activities such as coal mining and combustion have been reported as one of the causes of environmental pollution in many nations of the world. These have also resulted in various health effects (Horton, Mortensen, Iossifova, Wald & Burgess, 2013). In Africa particularly South Africa, the domestic sector especially coal burning from power stations for generating electricity is responsible for high levels of air pollution (Department of Environmental Affairs and Tourism [RSA], 2005). Similarly with respect to water pollution high rates of urbanization and industrialization are reported to have aggravated the threat to wetland resources (Coetzee, 1999).

In recognition of the environmental issues, the quest has been for many years now to address these problems by considering ways and means by which the international community could address them (Brundtland, 1987). Despite the major efforts to address environmental problems, it is reported that, the more we try, the less sustainable our world environment is becoming (Govindaswamy, 2006). It is opined that a solution to environmental problems therefore will require environmental education, proper understanding and knowledge of it which has to be deeply incorporated in the education system at all levels of education (Shukla, 2001 as cited

by Shobeiri, Omidvar, & Prahallada, 2007). It is averred that if an acceptable level of global environmental sustainability is to be achieved, then there is an urgent need for every citizen to be empowered with essential knowledge and information about the environment (Govindaswamy, 2006). This will enable everyone to participate in making decisions and changing daily routines and lifestyles that leads to the degradation of the environment (Myers & Macnaghten, 1998).

## LITERATURE REVIEW

*Knowledge* according to the Tbilisi Declarations is defined as to help social groups and individuals gain a variety of experience in, and acquire a basic understanding of the environment and its associate problems (UNESCO-UNEP, 1978). A number of research studies have compared the levels of environmental knowledge of students between two different places. They have also explored this from the demographic perspective of students. For example, Mohanty & Sarmah (2012) compared the levels of environmental knowledge of Indian students from both urban and rural settlements with reference to their gender and locations. The authors reported statistically significant differences between students from these two locations (ibid). Similarly, a comparative study of Canadian and Taiwanese Children revealed statistically significant differences in their levels of knowledge between these two countries. They further reported no significant gender differences between the two groups (Huang & Yore, 2003). Aside from investigating students' levels of environmental knowledge with respect to their demographic variables, researchers have also examined students' sources of environmental information. These sources of information have varied from people to the media, in the form of both print and electronic from country to country. For instance a comparative study of Canadian and Taiwanese Children reported television as the most important source of environmental information for children from both countries (Huang and Yore, 2003). Among Indian and Filipino students television was identified as the most important source while magazines and newspapers were secondary (Chapman & Sharma, 2001). These students further indicated that their parents were poor sources of environmental information compared to any other (ibid.). It is very important to be environmentally knowledgeable because it will help people in displaying positive attitude towards the environment and to take necessary actions to protect it (Stevenson, Peterson, Bondell, Mertig & Moore, 2013). This is very important for the younger generations who are going to be leaders of tomorrow. For instance, it is averred that students' positive attitudes towards the environment is influenced by the amount of knowledge they have acquired (Harun, Hock, & Othman, 2011). Various research studies conducted in different parts of the world have reported low levels of knowledge among students which affected their attitude towards the environment. (c.f., Alp, Ertepinar, Tekkaya, & Yilmaz; DeChano 2006; Hausbeck, Milbrath, & Enright, 1992; Lasso de la Vega, 2006; Makki, Abd-El-Khalick, & Boujaoude's, 2003). For instance, a study conducted in Nigeria reported a very low level of environmental knowledge among students (Ibrahim & Babayemi, 2010). These researchers bemoaned the fact that the mean knowledge score of the students was not just low but very low which affected their attitude towards the environment (ibid). In this study therefore the intention was to assess the levels of knowledge of secondary school students about environmental pollution from two South African provinces. The level of knowledge among students living in different environmental conditions (coal and non-coal mining areas) was compared.

## METHODS

### Study Site

This comparative study was conducted in two locations. The first was Emalahleni a town in Mpumalanga province in the coal belt of South Africa. This town is dotted with coal mines and this product is generally hauled by trucks to harbours in the coast for export internationally. Also found in this town are coal-fired electricity generating power stations and foundries that burn coal for energy. The coal-fired power stations and foundries too, spew out noxious gases such as carbon monoxide, carbon dioxide and sulphur-dioxide. All these pollutants must affect the livelihood of people and school going children living in the immediate vicinity. The second location was Soshanguve which is located in Gauteng Province. A distinguishing feature between the two sites is that the latter is in a non-coal mining area. That is, of people and school going children from Soshanguve do not experience daily pollution from the coal mines.

## Participants

Participants from the coal mining environment were 423 while those from the non-coal mining environment were 330. The participants were from five schools in each area. From the mining area schools were selected because they were in the vicinity of the mines. On the other hand, the five schools from the non-coal mining environment were in the vicinity of a university in Gauteng. In each Province, one hundred questionnaires were administered to students in each of the five schools. In each Province, five hundred students were selected, one hundred students who were from grades eight to twelve in each of the schools. One hundred questionnaires were administered to students in each of the five schools.

## Instruments and Procedures

Data were collected by means of a questionnaire made up of a combination of three parts. The first part requested participants to provide demographic data which included gender and school type. The second part *Knowledge* scale comprised 12 - items on a 5 point Likert type scale on environmental pollution issues. The third part was an open-ended question comprising ten items requesting the students to indicate their sources of information with regards to environmental pollution. In this part, students from both Provinces were asked to write down and rate in terms of importance to them, the sources that they gathered information from about environmental pollution where the highest was 1 and lowest 10.

The questionnaire used in the second part was a 12 - item Likert type scale adapted from three other questionnaires (Yilmaz, Boone, & Anderson, 2004; Lasso de la Vega, 2006; Bas, Teksoz & Ertepinar 2011). Participants were requested to register their views on a five point scale anchored by 1 = Strongly Disagree and 5 = Strongly Agree. In South Africa students do not take environmental education as a subject. So the basis for choosing 12 items was because the researcher looked into the secondary school curriculum for Grades 8 – 12 in subjects where environmental concepts are taught. These concepts were mentioned in subjects such as Life orientation as well as in Life and Natural Sciences. For instance, item statements contained concepts such as climate change, ozone layer, global warming, and acid rain all taken from the curriculum. The questionnaires were administered to students with the help of some educators in the various schools. The same questionnaires were administered to students in the two Provinces. This was intentional because the main purpose of this study was to compare the levels of awareness, knowledge and attitude of students between two Provinces. The completed questionnaires were collected a week later. All analyses in this study were computed using IBM's SPSS © version 19.

## RESULTS

### Rate of Return

In the coal mining area, 500 questionnaires were distributed to participants in three public schools and two private schools. Of the 500 questionnaires, 423 (85%) copies were returned. Similarly, in the non-coal mining area, 500 questionnaires were distributed to participants in four public schools and one private school. In this instance, 330 (66%) completed questionnaires were received.

### Biographical Data

There were 753 students, who were in Grades 8 to 12 from the two study sites. Their ages ranged from 13 years – 23 years ( $M = 16.1$  years;  $SD = 1.75$ ). A more detailed biographical data of the respondents is outlined in Table 1.

**Table 1:** Biographical data depicting the gender and school type of students from Mpumalanga (N = 423) and Gauteng (N = 330)

Variable	Province	
	Mpumalanga	Gauteng

	n	%	n	%
<b>Gender</b>				
Male	189	44.7	150	45.5
Female	234	55.3	180	54.5
<b>School type</b>				
Public	250	59.1	243	73.6
Private	173	40.9	87	26.4

## Comparison of students' knowledge with respect to gender and school type

Here nine t-tests were conducted from the same data sets. In order to eliminate a type 1 error, that is, (a greater chance of detecting what appears to be a significant finding in error), a Bonferroni adjustment was applied. So, if significance was set at a p value of .05 then this was adjusted to the value of .0055 was (.05/9 = .0055).

In comparing mean scores of students from the two Provinces, the unpaired *t*-test was performed to evaluate differences in the levels of Knowledge for the two provinces. The result showed statistically significant differences between the two provinces [ $t_{\text{Knowledge}} (751) = 40.082, p = .0001$ ]. Here, students from Mpumalanga Province had higher levels of Knowledge than their counterparts in Gauteng Province (see Table 2). In terms of gender, statistically significant differences were computed for both males [ $t (337) = 17.93, p = 0.0001$ ] and females [ $t (412) = 16.41, p = 0.0001$ ]. In both instances, it may be seen from Table 2 that students from Mpumalanga Province had significantly higher mean scores than those from Gauteng Province with respect to gender. Regarding the school type statistically significant differences were computed for public schools [ $t (491) = 17.833, p = 0.0001$ ] and private schools [ $t (258) = 18.139, p = 0.0001$ ]. Also here, students from Mpumalanga Province had higher levels of Knowledge than their counterparts in Gauteng Province.

**Table 2:** Means, Standard deviations and *t*-tests in respect of the Knowledge variable with respect to gender and school type in the two Provinces.

Variable	School type	Province				<i>t</i>	df
		Mpumalanga		Gauteng			
		M	SD	M	SD		
Knowledge		48.81	5.83	31.42	6.08	40.084*	751
Knowledge	Males	43.33	5.4	31.93	6.3	17.93*	337
	Females	40.59	5.9	30.99	5.9	16.412*	412
Knowledge	Public	42.11	5.9	32.31	6.3	17.833*	491
	Private	41.39	5.6	28.92	4.4	18.139*	258

\*  $p < 0.0055$

## Sources of environmental information

Here, Students from both Provinces were asked to rank ten different sources of environmental information in the order of importance to them where the highest was 1 and lowest 10. It is observable from Table 1.5 that the rankings were virtually the same for six sources. Newspapers were reported to be the highest source of information for about a quarter of the students [Mpumalanga (24.40%); [Gauteng (28.76%)]. This was followed by school lessons at 19.84% and 21.55% respectively. Differences were reported only for four sources of information (in bold type in Table 1.5). These for example related to magazines and television. Sources such as Parents and friends were the least ranked sources by students from both Provinces.

**Table 3:** Students' percentages and rankings of their sources of environmental information

Sources	Province			
	Mpumalanga		Gauteng	
	%	Ranking	%	Ranking
Newspapers	24.40	1	28.76	1
<b>Magazines</b>	<b>7.70</b>	<b>4</b>	<b>7.58</b>	<b>3</b>
<b>Television</b>	<b>7.61</b>	<b>5</b>	<b>6.33</b>	<b>6</b>
<b>Radio</b>	<b>7.03</b>	<b>6</b>	<b>6.55</b>	<b>5</b>

<b>Internet</b>	<b>7.88</b>	<b>3</b>	<b>7.21</b>	<b>4</b>
Books	6.28	10	5.09	10
Parents	6.45	7	5.73	7
Friends	6.32	9	5.55	9
Extra-Curricular Activities	6.39	8	5.67	8
School lessons	19.87	2	21.55	2

## DISCUSSION AND CONCLUSION

The purpose of this study was to compare the levels of knowledge of South African's secondary school about environmental pollution between two Provinces. This was examined with reference to their demographic variables involving gender and school type. Also, students' sources of environmental information were determined. As regards students' level of knowledge, the result revealed statistically significant differences between the two provinces. Here, students from Mpumalanga Province had higher mean scores than their counterparts in Gauteng Province. This result agrees with a comparative studies conducted among students between two locations in India (Sarmah & Mohanty, 2012) and China (Tiefenbacher, He, Hong & Hong 2011) where statistically significant differences were reported. On the other hand, a study between United States and Singapore students reported no significant differences (Benton, Raymond, Funkhouse & Ray, 1994). With respect to students' demographic variables, statistically significantly gender differences were established as also reported for comparative studies conducted in other countries (Benton, *et al.*, 1994; Huang & Yore, 2003). However the study of Shobeiri, *et al.*, (2007) reported no significant differences for gender between two countries. With respects to school type effect, statistically significant differences were reported in this study. Our result is in agreement with the following studies where significant differences were also reported for school type in India (Shobeiri *et al.*, 2007) and Turkey (Tuncer, Ertepinar, Tekkaya & Sungur, 2005). However, a study conducted in Nigeria reported no significant differences for school type (Akomolafe, 2011). Lastly, as regards students' sources of environmental information, newspapers were identified as most important by students in both Provinces. This finding is similar to that reported in Singapore where media (newspapers, magazines radio and television) were reported to be the highest (53.7%) source of environmental information for students which was followed by school [30.7%] (Ivy, Road, Lee, & Chuan, 1998).

It is reported in this study that there were statistically significant differences with regards to all the variables tested between the two groups of students. In all, students from Mpumalanga Province had higher mean scores than their counterparts in Gauteng Province. Mpumalanga students' higher mean scores might be due to the fact that they school and also live in a polluted area and experience this problem as part of their daily lives. However, this we feel might have motivated them to display a higher level of knowledge about environmental pollution. On the other hand, Gauteng students' significantly lower scores to the best of our knowledge might be due to the fact there are little or no environmental challenges in this particular area. This assumption can be supported with a study conducted in South Africa, which reported that those most directly affected by pollution were most likely see it as a problem than those who are not affected (Anderson *et al.*, 2007). With respect to sources of environmental information, we report that among all the other sources, newspapers were rated as most importantly by students in both Provinces. We can deduce from this result that media has a very strong influence on students' environmental knowledge in both Provinces. The fact that newspapers were mostly rated instead of school lessons by students in both Provinces should be a cause for concern to the education community. This may be due to the fact that these environmental concepts are not taught effectively by teachers like they teach other concepts. It may be that they only concentrate on the concepts they are familiar and comfortable with and avoid or give less attention to those they do not know. It is therefore recommended that school lessons should be the primary source through which students get environmental information while other sources could be secondary

Adequate knowledge about the environment and its associated problem is very important. We therefore recommend that proper trainings should be given to teachers that handle these environmental concepts in the classrooms. This will enable them to teach the concepts to their students effectively. In fact it is reported that teachers' understanding and basic knowledge about environmental concepts they teach in the classrooms goes a long way in affecting and influencing their students' knowledge about the concepts. If therefore teachers themselves are not environmentally literate, it will be impossible for environmentally literate students to be



produced (Loubser, Swanepoel, and Chacko, 2001). Furthermore, our children must be made to be conscious of the fact that they are part of the problem, and therefore they have to be part of the solution. We conclude that it is important for children in their teenage years to know and be aware of environmental matters. This is because they will grow to be conscious and responsible adults who will take care of their environment. They will not only protect the environment, they will also pass these to their families and friends and later passed on to the next generation as we can see in the result that parents and friends are not seen as important sources of environmental information. As it was mentioned earlier on that the selected schools in Mpumalanga Province are located around the mines and allied industries that emit pollutants which are assumed to affect the health of these children, it is therefore recommended that appropriate measures should be taken by the school management to safeguard their health and that of their teachers. It is also suggested that government can make policies that schools should not be cited close to coal mines and foundries and existing schools may be relocated far away from these industries.

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# **SOCIAL MEDIA AND SMEs: THE DRIVERS OF SUCCESS FOR MARKET EXPANSION IN TRANSITION ECONOMIES**

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## **ABSTRACT**

*Social media is perhaps an organisation's most pervasive marketing tool. The consequences of social media application are experienced at every level in an organisational context, but most extensively experienced in developing effective marketing communication strategies. Drawing on constructivist perspectives, recognising that socially constructed reality embedded within this evolving technocultural construct, the current study aims to illustrate that the understanding of social media must begin not in the technological domain but with the way in which the users negotiate meanings between and among themselves in the Internet ecosystem. This could potentially help marketers develop an effective marketing communications programme. Understanding the coevolution of social media connectivity and sociality in the context of the emerging culture provides deeper insights into how SMEs, particularly in transition economies, could adapt and contextualise the values of openness and connectedness offered by this technological tapestry. Certain conditions in which the deployment of cultural transformation is likely to succeed are identified, and a future empirical research agenda is suggested.*

**Keywords:** Social media, marketing, transition economies, marketing communications, facebook

## **INTRODUCTION**

The advent of the Internet has created new ways in which consumers interact among themselves and engage and interact with marketers through various forms of social media. As companies begin to realise the implications and opportunities inherent within this evolving technology, this has led them to experiment on different ways of formulating strategies that exploit the benefits of social marketing (Chaston, 2013; Kim and Ko, 2012). The continuing importance of this technological context and the realisation of its strategic opportunities by small firms have caused them to recognise that social media constitutes one of their competitive weapons. Such a realisation may be not surprising since social media provides a much broader base for competition than the traditional spatial marketing environments. This paper aims to examine how participatory social and connectivity culture offers expansive marketing opportunities for SMEs in the Republic of Kosovo. Drawing on constructivist perspectives, recognizing the socially constructed reality embedded within this evolving technocultural construct, the current study aims to demonstrate that the understanding of social media must begin not in the technological domain but with the ways in which users negotiate meanings among themselves in the Internet ecosystem. This could potentially help marketers develop an effective marketing communications programme. Understanding the coevolution of social media connectivity and sociality in the context of an emerging culture provides deeper insights into how SMEs, particularly in the transition economies, could adapt and contextualise the values of openness and connectedness offered by this technological tapestry. In the context of SMEs, understanding the underlying communicative and user-negotiated meaning offers greater enhanced implications

and opportunities for marketing practices in the transition economies than via the technological and determinist perspective (Feenberg, 2002).

## THEORETICAL FRAMEWORK

The social media is perhaps an organisation's most pervasive marketing tool. The consequences of social media application are experienced at every level in an organisational context but are extensively experienced in developing effective marketing communication strategies. In contrast with both the extensiveness of its vigorous presence in consumer daily experiences and the application of this evolving technology as an object of study in SMEs in transition economies, particularly examining the way in which social media platforms are used to create marketing communication exposure in transition economies has been completely ignored by current studies. It is customary to begin any discussion on social media with a consideration of the media or vice versa and then to contrast these concepts. For example, Tuten and Solomon (2013) define social media as follows:

*The online means of communication, conveyance, collaboration, and cultivation among interconnected and interdependent networks of people, communities, and organisation enhanced by technological capabilities and mobility. (p. 2)*

While acknowledging that the media has multiple meanings, they define media as the 'means of communication'. Such definition fails to clearly delineate the concepts. Confusion results from defining each as a variant of the other. For example, the social media is defined as the 'online means of communication' and media as 'means of communication'. Most current conceptualisation of the social media in business, communication studies, and psychology and research over the recent past has therefore been that of 'means of communication' (Schaefer, 2011; Ellison, Steinfeld, and Lampe, 2007; Boyd, 2007), in which the vehicle of delivery is clearly embedded as an indispensable ingredient (Morozov, 2011; Christensen, 2011). These difficulties have implications beyond conceptual clarity. Kaplan and Haenlein (2010) have successfully argued that the social media is Internet-based applications that build on the ideological and technological foundations of Web2.0 and that allow the creation and exchange of user-generated content (p.61). Hoffman and Fodor (2010) extended this idea to an interaction between marketer and customer other than a 'means of communication'. For Hoffman and Fodor, the dynamics of the social media context rest on developing meaningful relationships with customers—online relationships that are developed through interactive conversations. The advent of Internet technologies along with their subsets provides consumers with a higher order of interaction and relationship development. This higher order of online relationship has not only provided consumers with enhanced relationship configurations but also provides them with interaction in greater depth, leading to engaged social commerce. Drawing on Hoffman and Fodor, the choices of developing effective social media marketing and the rationale for such choices are as follows:

1. *Dead-end choice.* In this choice, the marketer has only a limited ability to measure his social media efforts (fuzzy) and believes that his efforts are not working (failing). Managers find themselves faced with this choice as a result of the 'throw it on the wall and see what sticks' strategy and perform arbitrary changes with no way of measuring their impact.
2. *Measure and adjust.* In this choice, the marketer has a reasonable ability to quantify his social media efforts, and these measurements lead him to believe that his efforts are not working (failing). The manager acknowledges that something is not working well but is able to adapt his strategies to fit the context.
3. *Iterate for success.* Here, the marketer has both a reasonable ability to measure his social media efforts (quantifiable) and the belief that his efforts are working (succeeding). Since the components are being measured, the manager can purposefully iterate to improve even more.
4. *The final and most important choice is naïve optimist.* In this choice, the marketer has only a limited ability to measure his social media efforts (fuzzy) yet believes that his social media efforts are working (succeeding). S/he believes that the social media is worth the effort but is not quite sure how to measure his/her efforts.

There is, in fact, ample literature suggesting that the social media, if effectively measured, could improve the relationship between marketers and consumers, which could lead to brand engagement (Hoffman

and Novak, 2013; Jobber and Ellis-Chadwick, 2013; Krishnamurthi and Gopinath, 2010; Dan and Dan, 2011; Brown and Fiorella, 2013).

Given this evidence and the extent that such understanding could improve brand awareness and brand engagement, it seems a reasonable conjecture that these strategies are not embedded in the 'means of communication' but draw on the cultural interaction and social affordances of this medium. Palan (2000) noted constructivist beliefs that there is an intimate and reciprocal connection between human subjects and the social world. Constructivist approaches stress the shifting nature of social reality, so they tend to be less conservative than approaches that take existing meaning as given (O'Brien and Williams, 2013). As Dijck (2012) fittingly observes,

*One obvious problem with studying the phenomenon of social media is that it involves a multitude of problem angles that each bring along with a different academic expertise . . . we need insights from at least six disciplinary perspectives—information technology, social science, humanistic, economics, law, and political communication—to open up a panoramic view onto social media. (p. 43)*

According to Dijck, the mutual shaping of microsystems and ecosystems constitutes the nucleus of the social media, involving a multifaceted phenomenon that tends to separate user-technology interaction from the organisational socioeconomic structure. Van Dijck emphasises that a connective approach aimed at disassembling platforms and reassembling sociality can hardly succeed if we fail to take into account the larger cultural matrix in which this assemblage emerged. The current study subscribes to this view at the ontological level, which recognises the norms and mechanisms that underscore the construction of sociality and creativity. Reminiscent of constructivist perspectives, Gitelman (2008) articulated that socially realised structures of communication, where structures include both technological forms and their associated protocols, and where communication is a cultural practice, are a ritualised collocation of different people on the same mental map, sharing or engaged with popular ontologies of representation. For Gitelman, the media historically coevolved with the people who use them. Internet technologies in tandem with the prototypical margins have witnessed some major transformations in recent years—from networked communication to 'platformed sociality, and from a participatory culture to a culture of connectivity' (Castells, 2007; Manovich, 2009; Ozuem, Howell, and Lancaster, 2008; Dijck, 2009; Feenberg, 2009).

## **SOCIAL MEDIA AND SMEs IN TRANSITION ECONOMIES**

The expansion of small and medium enterprises (SMEs) in transition economies is even more critical, primarily as a result of the limited resources they possess, as well customers being more sensitive in the choices they make because of restricted purchasing power; thus, encountering social media services employment selection is a great challenge for SMEs, and as a result, it has limited existing research foundations.

Current literature indicates that the appropriate application of social media distinguishes a successful business from a unsuccessful one (Kaplan and Haenlein, 2010; Mangold and Faulds, 2009; Qualman, 2013). The social media allows customers to identify their needs and wants, make comparisons among products and services available from companies in the market, judge the opinions of prior purchasers, and make virtual evaluations of products/services available. The picture becomes even clearer when the statistics of 2012 are taken into consideration. They indicate that 76% of customers prior to making local business choices conduct an online search (either occasionally or regularly) through the application of social media services (Anderson, 2012). Customer power regarding SMEs can be proved by the considerable number of customers involved in social media services. As illustrated by Qualman (2013), if 'Facebook was a country, it would be the third largest country in the world behind only China and India'. Lately, there is debate among researchers, businesses, and customers in connection with the reliability of information about products and services presented by enterprises through the social media. However, Anderson's study (2012) illustrates that 72% of consumers located in the UK, the USA, and Canada trust online reviews/information as much as they trust personal recommendations.

According to the above statistics, SMEs through the employment of social media save time and money and establish a strong bond with the customers. Different social media services are replacing the application of TV and other forms of advertising that are very expensive and reach target customers solely during specific

period of times, whereas SMEs, by means of social media services, present products and services, as well as measure the customers' evaluation—information that assists them to understand their concrete market position and shape their strategic enhancement process.

As regards the very intense competition, accompanying the enlargement of the diversity of customers' needs and wants, SMEs seek groupings of customers in very specific niche markets. Small specific markets permit SMEs to meet each and every customer's requirements and expectations. Anderson (2008) also supports this: "The mass market is turning into a mass of niches". The social media, compared with other marketing techniques, is the greatest opportunity for SMEs to send messages and launch new products to very small groups of customers with the same interests in products/services, involving fewer financial resources and over a shorter period of time.

The above clearly shapes the massive significance of SMEs being online using different social media services. Furthermore, the social media is the most real and scalable opportunity for enterprises to expand in their existing local markets and foreign markets. Thus, 'businesses don't have the choice on whether to do social media; the choice is how well they do it' (Qualman, 2013). This means that SMEs must be very careful in choosing the appropriate social media services and knowing how to employ and utilise them. Mills (2013) suggests that three main social media services generate the highest number of customers for SMEs: Facebook, Twitter, and LinkedIn. Thus, these are the social media services applied by SMEs to enlarge their domestic and foreign market scope; as such, they will also be considered in this research.

## Facebook Social Media

Seventy-seven percent of SMEs employ Facebook social media as a form of announcing products and services to existing and prospective customers, or as a means of expansion in domestic and international markets (Stelzner, 2012).

Waters et al. (2009) state that the benefit that organisations gain from the using Facebook social media, in comparison with other social media services, is the opportunity for businesses to employ different public relations strategies mutually. Waters et al. (2009) present three main public relations strategies that can be utilised by SMEs in Facebook social media as follows:

1. Disclosure public relations strategy—this public relations strategy encompasses personal information about a company: description, history, mission statement, URL, logo, administrators listed.
2. Information dissemination strategy—in this public relations strategy, news links, photos posted, videos, audios, posted items, discussion walls, press releases, and campaign summaries are presented.
3. Involvement public relations strategy—among the major elements of this public relations strategy are customer access, by sending messages/e-mails to the company, the company phone number, calendar of events, and volunteer opportunities.

Mutual utilisation of the above public relations strategies on Facebook social media facilitates, for SMEs, the process of informing customers about their products and services and is a means of identifying possible customers, their requirements, and their expectations. Furthermore, McKinsey & Company Global Institute (2010) affirms that through Facebook social media, financial departments of SMEs can anticipate the rate of a company's expansion in existing or new domestic and foreign markets. On the other hand, the main issue of initiating operations in foreign markets is the identification of international partners. Facebook social media is one of the main social media services utilised by SMEs to identify strategic domestic and international partners as prospects for achieving defensive agreements for international product/service launches (Stelzner, 2012; Waters et al. 2009).

## Twitter Social Media

Twitter social media was launched in 2003 and it is the second largest social media (after Facebook). Thus, SMEs use this high rate of customer traffic as an advantage to present new products or services through Twitter either in domestic or in foreign markets.

Twitter is considered the social media service that has experienced the fastest rate of growth for marketing purposes in comparison to all other social media services, showing a 949% increase since September 2008 (Schonfeld, 2009). The *Economist* (2010), in Bulearca and Bulearca (2010), quotes Twitter is “an information company”. Twitter, through its service platform, with 140 characters, can send messages to a large range of customers at the same time; thus, its platform establishes a perfect relationship among businesses and customers (Bulearca and Bulearca, 2010). In addition to this, Bulearca and Bulearca (2010) believe that Twitter is the most effective social media service in conveying information from enterprises to current and existing customers, whilst circulating inquiries from customer to customer. Thus, Twitter is the greatest marketing tool replacement for the traditional word-of-mouth process, boosting the enlargement of customer targets, increasing the sales of existing products or services, identifying prospective customers’ needs and wants regardless of their geographical placements, and facilitating the overall launching process of new products and services.

Regardless of the above positive arguments, there are different views among SMEs and scholars relating to the drawbacks that Twitter social media encompasses whilst being used for marketing purposes (particularly for business expansion). Statistics for 2013 illustrate debates on the importance rates of Twitter and other social media services. Currently, compared with LinkedIn, Twitter is ranked as a social media service that better captures the interest of existing and new customers and has a higher rate of customers’ engagement. However, a survey of the year 2013 (Liubarets, 2013) explains that “Twitter might be fading into third place”, switching places with LinkedIn social media, which then occupies the second place, with Facebook social media in the first place. According to Buleraca and Buleraca (2010), the drawbacks that characterize the Twitter social service are the following:

1. The difficulty in measuring return on expansion investment, as Twitter is “more people-oriented than financial”.
2. Employing Twitter social media effectively requires consistency and commitment, thus, requiring a great deal of time. This means SMEs must possess a special strategy for managing the efficient use of time spent on Twitter.

## LinkedIn Social Media

LinkedIn social media was launched in May 2003. Statistics illustrate an increase in the number of LinkedIn visitors specifically in the last two years, indicating a 67% boost from 2012. Rusli (2013) quotes, ‘LinkedIn aggregates business news and hosting expert blog posts’; thus, businesses can directly understand their audiences’ opinions of their products and services. As such, companies are capable of establishing an effective expansion strategy. The Mountain View, California, company asserts that its current value increased to \$18 billion from \$4 billion when it went public primarily as a result of the utilisation of the LinkedIn social media service.

In 2012, LinkedIn also replaced its old content with a new platform, which facilitates its overall usage process. On the other hand, there are opinions that LinkedIn is the key social media which enhances the business process of identifying business partners in domestic and international markets. Thus, LinkedIn’s professional nature provides the opportunity for SMEs to receive professional information about other prospective company partners.

## SITUATING SOCIAL MEDIA IN KOSOVO

This research project, in comparison with existing findings, presents an almost completely different SMEs’ point of view towards social media services. The statistics in this research are even out of sync with existing research on the ranking of social media services, placing Facebook and LinkedIn as two key social media services, whereas Twitter social media has been completely ignored by companies in the Republic of Kosovo. On the other hand, LinkedIn’s move to second “place of importance” instead of Twitter social media corresponds with the existing literature scenarios (Liubarets, 2013).

**Fig.1. Employment of social media for domestic and international expansion**

Social Media	Domestic Expansion	International Expansion
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1. Facebook	30%	10%
2. LinkedIn	5%	5%
3. Twitter	0%	0%

As illustrated in the table above, 30% of SMEs in this research state that they employ Facebook social media to present new products or services in existing or new domestic markets. Five percent of SMEs employ LinkedIn social media as an expansion strategy in local markets, whereas Twitter is completely ignored by SMEs regardless of the fact that marketing agencies propose Twitter inclusion in SME marketing strategies.

In addition, as far as the expansion of SMEs in foreign markets is concerned, 10% of SMEs in this research say that they employ Facebook social media to present products or services in international markets, 5% of SMEs utilise LinkedIn as an expansion strategy for foreign clients, whereas Twitter is again completely ignored by SMEs in the Republic of Kosovo. From among the SMEs that asserted that they apply Facebook or LinkedIn social services to launch products/services in developed Western markets, they also quoted that Facebook and LinkedIn social services were principal assets in identifying strategic international stakeholders—findings that correspond with the existing literature.

From the above statistics, it can be seen that the research findings of this study explain that small and medium enterprises (SMEs) in Kosovo are reluctant to employ social media services for marketing purposes even though marketing agencies consider the application of social services an asset for SME expansion. The director of a marketing agency has been quoted as saying that “social media is new and intriguing, with endless possibilities, so we insist on convincing our SME clients to employ social media in their marketing strategy; yet, unfortunately, SME clients have a problem accepting new media”. This research says that SMEs in transition countries are sceptical about implementing social media strategies, partly as they hardly understand how the social media functions.

On the other hand, SMEs that have employed Facebook or LinkedIn social services as part of their marketing strategy have encountered growth in a shorter period of time and with lower financial investments. In support of this, the director of the marketing agency in question has stated, ‘Social media strategies designed, customised, and implemented seem to mean “good business” for the clients that we have worked for, especially for the SMEs, since most of them keep coming [back]for more’.

The gain from social media application can be exemplified by an Internet start-up company in Kosovo that had the idea of selling and delivering books and magazines in the Albanian language. This enterprise had failed in the local market mostly because of a small market and difficulty with online payment methods. As a result, the SME decided to enter new markets. It identified as potential markets countries such as Germany, Switzerland, Austria, Sweden, and Italy, as these are the countries with large Albanian-speaking populations. The targeted groups of the company were Albanian customers between 25 and 40 years old, living in these countries. The company applied Facebook and LinkedIn as an expansion strategy, and the results were astonishing. Sales rose by nearly 500% in the first two weeks.

## CONCLUSION AND RECOMMENDATIONS

Small and medium enterprises (SMEs) in transition countries, specifically in the Republic of Kosovo, underestimate the use of social media services as a marketing expansion strategy. SMEs in transition countries employ social media services around 40% less than SMEs in Western countries. Besides, among Facebook, Twitter, and LinkedIn, evaluated by existing literature as the three most used social media services, Twitter was completely ignored by SMEs in Kosovo. The challenge in utilising social media services comes primarily as a result of SMEs in transition countries hesitating to change and experience new social media opportunities. The very limited number of SMEs, in this research investigation, that have utilised social media as part of their marketing strategy claims successful expansion for their enterprises in both domestic and foreign markets. Thus, this research project recommends that SMEs employ social media as part of their marketing strategy

1. so they can inform and convey product or service choices to new domestic and foreign target markets faster,
2. for SMEs to gain the opportunity to target several niche markets at the same time,

3. for SMEs to be able to launch new products and services in new domestic and foreign markets with the efficient use of financial resources, and
4. as social media facilitates the identification process of foreign partners required for expansion in foreign markets.

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# THE ROLE OF ORGANISATIONAL STRUCTURE IN SMALL AND MEDIUM ENTERPRISES IN RELATION TO ORGANISATIONAL PERFORMANCE

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## ABSTRACT

*Extant studies conducted in regard to organisational structures have produced unclear and descriptive knowledge, applicable only in theory. As a result a confusing mixture of hypotheses, recommendations and decision-making rules has been created, without actually contributing to the practical application of designing an organisational structure. This paper considers contrasting scholarly and practitioners perspectives and offers a new prism on the role of organisational structure in small and medium enterprises.*

**Keywords:** Sales department, sales force, customer relationship management, organisational structure, small and medium enterprises

## INTRODUCTION AND THEORETICAL FRAMEWORK

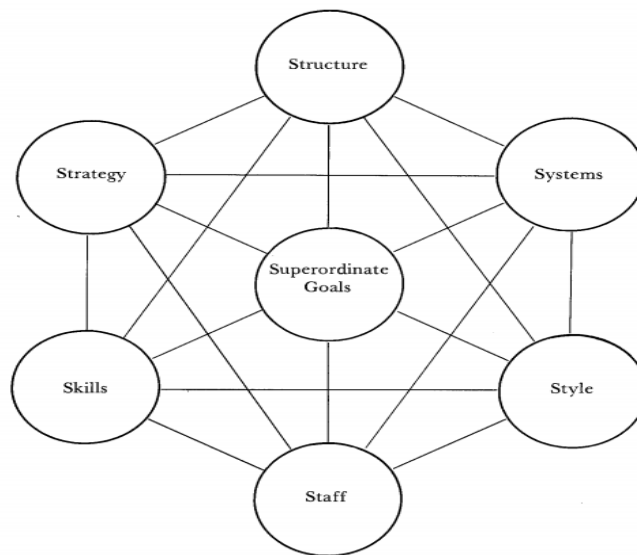
There are number of studies focusing on organisational structures (see for example Mintzberg, 1979; Williamson, 1975; Robbins, 1990; Docherty *et al*, 2010; Hao *et al*, 2012; Martinez-Leon and Martinez-Garcia, 2011) and these agree that as soon as a company, regardless of the industry it operates, hires one or more employees; a certain type of structure emerges. The design of that structure is a mixture of intended, planned choices and operationally emerging needs and it plays a vital role in the establishment of a future strategy, because of its direct effect on the company's capabilities and its ability to develop a competitive advantage (Burton and Obel, 1998). An organisational structure consists not only of hard components, such as departments, teams and groups, but also of soft components representing the relationships between these hard components (Bunge, 1985). Checkland (1999), states that the organisational structure is a reflection of systems thinking of the type discussed by Bunge (1985). Such is composed of elements and relationships between those elements, shaping the total image of the organisation. The structure of an organisation could be considered as a superior form of those relationships, leading to the next step of collaboration (Bunge, 1979).

The theoretical concept of organisational structure (henceforth OS) and design has gone through several stages of development. As a first understanding of how an organisation should be designed the normative universalistic approach is taken, promoting the best structural form and forming a generalized view of this, regardless of any specific conditions. Evolving into the normative contingency approach, the notion of OS changes and the best theoretical structure design is aligned with a specific set of economic, business and industry conditions. This conceptual evolution culminates in the emergence of the equity view, which considers that OS design is related to a specific set of multiple conditions with several best options available (Moreno-Luzon and Peris, 1998). That last stage of the theoretical framework development is the modern understanding of OS and how it should be approached, especially when speaking of small and medium enterprises (SMEs) (Blackburn *et al*, 2013).

Kerlinger (1964) identifies five organisational dimensions as specialisation, standardisation, formalisation, centralisation and configuration. His view is based on the work of Max Weber (Parsons, 1947) and he argues that those dimensions distinguish the traditional, bureaucratic organisational structure from the charismatic structure. The author considers that the latter is highly flexible.

Pugh *et al* (1968), in their investigation of organisational dimensions and their attempt to track those dimensions across companies operating in different industries concluded that the theoretical and statistical frameworks of an organisation's dimensions could be created. As a primary limitation they outline the inability of applying their conclusions in practice, rendering their deductive approach somewhat unreliable (Jabnoun, 2005). Contrary to this viewpoint, in their previous study, Pugh *et al* (1963), demonstrated the positive application of these dimensions in more than 168 organisations operating in different industries, so that their second study could be reviewed as a confirmation using statistical and mathematical models to prove their thesis. Nevertheless, Waterman *et al* (1980) provide a 7-S framework of organisational structure, stating that an organisation is not simply a structure, but comprises of much more complex processes. Their framework strengthens earlier ideas advanced by Weber (Parsons, 1947) and Pugh *et al.* (1963, 1968), regarding organisational structural dimensions. They provide more detailed research into the components that were originally part of Weber's delineation of organisational dimensions.

#### 7-S Framework of Organisation Structure



Source: Waterman *et al*, 1980

Waterman *et al* (1980) focus on elements such as strategy, structure, skills, staff, systems (in terms of use of technology), and managerial styles and (for the first time) they introduce the element of shared values, which has come to be accepted as a milestone for most corporations when creating their corporate culture as a tool of competitiveness (Hax and Majluf, 1983). Schein (1971, 1988) offers a different dimensional notion of OS, suggesting that an organisation could be viewed in the context of three dimensions, specifically:

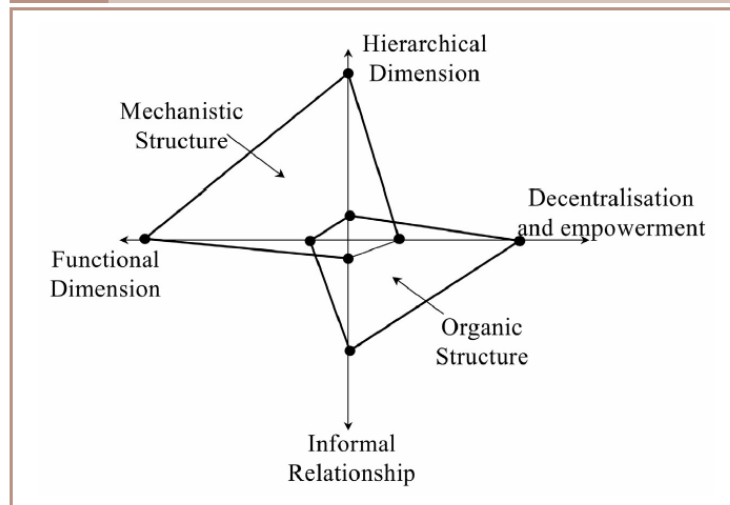
- 1) The hierarchical dimension, which relatively demonstrates certain rank division,
- 2) Functional dimension, which divides the labour functions within the organisation
- 3) The dimension of centrality and inclusion, representing a map of the current position of an employee regarding the core of the organisation.

Schein has been criticised (see, for example, Powell, 1990; Davidow and Malone, 1992) for duplicating elements of Weber's thesis and for not taking into consideration new types of organisational forms, which do not fit within this framework. Examples for this are the knowledge-based organisations and the emergence of network and virtual organisations, where the informal structure plays the central role. Those organisations drastically differ from the dimensional generalisation earlier provided by Pugh *et al* (1968) (Perez-Bustamante, 1999). There are criticisms of the mechanistic structure supported by Weber's dimensional elements, whereby

the organisation is considered to operate in a highly stable and efficient environment and its structure is a science. Taking this view, the employees are determined as economic subjects (Burnes, 2000). An alternative option to Weber's OS understanding is presented as organically structured entities, which is a concept describing a variety of social and economic forces that interact within a complex organisational structure (Cross, 2000; McCalman, 1996).

### Organic Structure of Organisation

Figure 2 Mechanistic versus organic structure



Source: Wang and Ahmed (2003)

Criticisms of such an organic type of structure include remarks about its complexity (it is difficult to understand) together with a loss of focus on the main organisational purpose (Jogarathnam and Tse, 2006). Communities of practice (CoP) are an example of an organisational type structured informally. Those communities represent groups of people informally united by their passion in a certain field (such as engineering, sales, marketing) to share expertise. Wenger and Snyder (2000) notions of CoP, suggest that communities exist within the organisation, and these often comprise members of external organisations. The primary goal of such communities is to produce knowledge based on the experience and expertise of members, with the aim of contributing to organisational improvements. CoPs differ from teams, since the latter are created by managers in order to complete a specific project, with team members selected on the basis of their ability to contribute to the aims of the project. Once the goals are completed the team disbands (Borzillo *et al.*, 2012). CoPs, on the other hand are created on the basis of passion about a certain topic, combined with knowledge and experience (Adams and Freeman, 2000). Their contribution to the organisation/s includes professional skills development and recruitment and retention of talented staff members. CoPs transfer best practice that is available to the current organisation, by sharing knowledge and leveraging their professional skills. In this way CoP members are able to quickly solve any problems emerging within their field of competency and they can contribute to the creation of new business branches (diversification) (Adams and Freeman, 2000; Hildreth *et al.*, 2000). The disadvantage of CoP is their problematic "cultivation" (Wenger and Snyder, 2000, pp. 140), which stands for creation and development. CoPs are usually created spontaneously, for example, colleagues go out for lunch, or they are discussing the newest practices during a coffee break. A major prerequisite for the creation of a CoP is, therefore, the goodwill of the employees to communicate and share knowledge and expertise. Furthermore, certain nurturing is required by the organisation's management in order for the CoP to serve the purposes required by the company (such as shaping the functions of the CoP without significant interference) at a later stage. The identification of a potential CoP that will fit corporate goals and provide support is vital. Moreover, certain infrastructures should be provided for the CoP, since it lacks legitimacy and budget, time and funds and these are all essential for reaching their full potential, keeping in mind that one of the major strengths of a CoP is their self-perpetuation, which sees community motivation driven by its own knowledge generation (Borzillo *et al.*, 2012). CoP practice is not only applicable in large companies but is also a potential competitive advantage for

SMEs, although most of the examples given in the literature associated with CoP are related to organisations like IBM, Hewlett-Packard and the World Bank- big, complicated international organisations. Wenger and Snyder (2000) and Hildreth *et al* (2000) provide examples of medium-sized companies adopting the practice of CoP, thus verifying that the CoP approach is relevant also to SMEs.

Empirical studies conducted in relation to organisational structure have produced unclear and descriptive knowledge, which has limited applicability in real companies (see for example Child, 1972; Pugh and Hickson, 1976; Geeraerts, 1984). As a result, confusing mixtures of hypotheses, recommendations and decision-making rules have been created, yet none of these have significantly contributed to the practical application of designing an organisational structure. Burton and Obel (1998) managed to collect a knowledge base, which consists of more than 450 rules related to organisational design. With such a vast volume of information, the debate on organisational structure design could be considered closed. However, authors such as Blackburn *et al* (2013) have subjected those rules to criticism, underlining the unclear methods upon which they are based and emphasising that analysis has been limited only to large companies, which is an obstacle for the generalisation of the findings.

Later empirical studies on OS design include SMEs in their focus. They add a new notion to the debate, stating that additional factors that should be taken into consideration, when designing an organisation are the owner/manager and employees' personal characteristics (Blackburn *et al.*, 2013; Nicolescu, 2009). Scholars and practitioners agree that an organisation in its initial stages of existence should align its structure and operations with a set of specific personal characteristics, which would be a primary requirement when recruiting employees, in order to be constructed on an efficient basis for growing the company. A justification is provided by the argument that the employees are the company's face to customers and partners, and managerial (owner) staff shape the inner environment within the company. It is an approved practice in large multinational companies to have specific requirements regarding future and current employees' personal characteristics in order to fit the organisational structure in the best way possible (Blackburn *et al.*, 2013; Nicolescu, 2009; Tushman *et al.*, 2012).

By adding that new factor to organisational design scholars and practitioners have broadened the initial set of factors, but it does not become more specific regarding the exact type of structure (Gibb, 2000; Fletcher and Harris, 2002; Hansen and Hamilton, 2011). As a major limitation they suggest that their findings are not generalisable because of major differences across industries, economies and business practices. Authors, therefore, only highlight some important factors that need to be considered when designing an organisational structure (Foreman-Peck *et al.*, 2006; Johnston, 2000; Nicolescu, 2009). This is described by Forsman (2008) as a responsible organisational structure, comprising a variety of factors (such as industry, local business, and the economic environment) which should be considered when designing an organisation. In his study, he suggests that even within the borders of the United Kingdom (UK), business conditions vary, thus he studies a Welsh SME using the same organisational structure when expanding to Scotland and tracks its failure. It is an appropriate example of generalisation failure due to inflexible structure design, which can be explained by the economic insignificance of a single SME, thus it is unable to inculcate its model of structure anywhere else apart from its initial market (Lyles *et al.*, 1993).

However, there are defenders of the practice of generalisations, stating that a company, especially an SME with limited resources, cannot restructure itself every time it penetrates a new type of market (Salavou *et al.*, 2003). Furthermore Pelham and Wilson (1995) state that organisational structure has minor influence on SME market position and profitability. They outline the fact that the only organisational structure variable that has certain influence over an SME is structural product differentiation. Consequently, if an SME distributes its limited resources over too many product lines, this may result in negative growth and loss of profitability. A potential advantage of the SMEs is their ability for faster adoption of new technologies in comparison with their large rivals. According to Salavou *et al.* (2003) this is the factor that allows SMEs to expand into new markets without redesigning their structure. The primary criticism of this opinion concerns the notion that the application of new technology is related to a shift in the operational processes of the company. Consequently, such a shift affects the initial organisational structure (either positively or negatively), thus without considering changes in that initial structure, in order to fit the process change, the application of new technologies could lead to disappointing results (Fu *et al.*, 2001). Continuing this position, it should be stated that technological development and organisational structure changes are processes with simultaneous progress. Their evolution, tracked by Mukherji (2002), has been synchronised since the late 50s': slowly but gradually following the

process of decentralisation. Organisational structure has gone through departmentalisation processes supported by the emergence of technology and presently evolving into informal organisational structure, surmounting the obstacle of monitoring by implementing information systems (Mukherji, 2002).

Most authors provide a combined, approximate image of what factors should be included in an SME organisational structure. A primary aspect that shapes the structure is given usage of technology, suited to the long-term growth strategy of the company. Another such aspect is the innovation and the alignment of the strategy with the local economic and business conditions, together with abundance of dimensional elements, where applicable. Evidence of all those factors within an organisational structure will support building-up a competitive advantage and achieving growth (Salavou *et al*, 2003; Fu *et al*, 2001; Mitzberg, 1979; Hansen and Hamilton, 2011; Blackburn *et al*, 2013). Nicolescu (2009) also notes the significant role of the sales force as part of the structure and reminds readers that it is the main generator of growth and competitiveness, within the structure of the SMEs.

## **SALES DEPARTMENT AND CUSTOMER RELATIONSHIPS**

In its simplest form selling represents the process of exchange, thus generating cash flows to the company regardless of its industry, but modern selling is a complex mixture of processes, factors and entities (Abed and Haghighi, 2009). Selling itself includes the use of a wide range of techniques, principles, and personal skills, combined to support the accomplishment of a variety of selling tasks (differing from the process of a sale) (Piercy, 2006). The role of the sales department goes far beyond simply generating sales revenue. Sales department functions have been extended, now covering roles such as marketing, customer management, environmental scanning, recruitment and the training of sales staff. Those added tasks are easily found and combined, within SMEs' sales departments, thus leveraging the importance of that part of the organisation.

In order to understand the vital role of the sales department, first, an understanding of the role of selling as a complex process should be developed. In the literature, selling is discussed using a range of conceptual explanations. There is increasing interest in selling principles and techniques that can be explained by the substantial role that the sales force has. Specifically, it is determined as the only link between the company and the customer, often meaning that the salesperson actually is perceived as representative of the company. Furthermore, even a carefully planned marketing campaign may have disappointing results without being supported by an effective sales force (Roman *et al.*, 2001; Smallbone *et al.*, 1995). Further functions could be added to the daily tasks of the sales force, including retaining customers, adding value to the selling process by identifying and satisfying customer needs and marketing the product/service (Baumgarth and Binckebanck, 2011).

Special attention is paid by a significant number of businesses to the personal selling approach, as an excellent tool for the execution of the emerging functions of the sales department (Shannahan *et al.*, 2012). The personal selling technique is seen as a technique to build a two-way communication bridge between the company (represented by the salesperson) and the customer. Personal selling adaptability allows the sales force to ensure that the customer receives a partial customisation of the offered products/services, thus allowing relationships to be developed. Because of the personal nature of the communication, personal selling predisposes simple commercial dealings to evolve into long-term partnerships (Dwyer *et al*, 2000; Bass, 1997; Shannahan *et al*, 2013). With regard to the advantages of this Hammann (1979) suggests, that personal selling relationships can prevent the loss of customers, by building relationships with high emotional switching costs for the customer. There is much criticism of personal selling such as the associated high costs, which are accumulated through recruitment and training of the sales force and when allocating a salesperson to work only with a limited number of customers (needed in order to build relationships) (Keillor *et al*, 2000). Moreover Johlke (2006) underlines the significance of the human factor when using the personal selling approach. He states that the experience and the expertise of the salespeople vary, thus an inconsistent performance is likely. Jaramillo and Marshall (2004) contribute to this notion suggesting that personal selling depends too much on the human factor more specifically, the variances in employees' daily performance. Consequently, it hides major risks, since the process is beyond control and is highly dependent on human emotions and mood. However, by building long-term relationships and by regularly communicating with customers, the sales force can satisfy strong service, thus building a positive feedback for the company, which may result in creation of a positive brand image of the



organisation, even in B2B (Business to (2) Business) relationships (Baumgarth and Binckebanck, 2011). Consequently, a positive notion is created with the customer along with a positive image of the organisation. The implementation of the personal selling approach can be reviewed as a long-term investment, since it is a useful tool for developing long-term relationships with the customers and for achieving mutual understanding of the needs between the company and its customers, but those benefits come on a high initial financial cost. As a limitation to that approach the sectors in which it could be applied are to be considered. It is not applicable for example in B2C businesses, because of the huge number of consumers that should be tracked, although with the emergence of new technologies this limitation is partially overcome (Shannahan *et al.*, 2013).

Scholars and practitioners agree on the usefulness of the personal selling approach when applied in modern selling, regardless of the classifications that describe personal selling as a traditional (old-fashioned) selling tool. This approach has evolved and matches the emerging needs of sales departments, with a more customer-centric approach. Such departments have seen improved performance and have protected their market share through personal selling. Although, it is subject to certain limitations, this approach easily fits in B2B sales department structures, because of the limited number of customers (less than mass consumer goods customers) and more significant contribution to the organisation stemming from those customers. Personal selling approach makes positive contributions to the organisation, by supporting the newly developed functions of the sales department (Shannahan *et al.*, 2013; Keillor *et al.*, 2000; Jaramillo and Marshall, 2004; Dwyer *et al.*, 2000; Johlke, 2006).

## Sales Department Structure

Sales department structures emerge as soon as the first salesperson is hired. Consequently, this structure requires planning in order to be shaped according to the future strategy of the company and its aims. Corresponding to the organisational structure, some practices within the sales department structure emerge operationally and are added to the planned structure, but do not necessarily improve it. The structure of the sales department, like the organisational structure, is a complex mixture of fragments, each contributing, not only to the traditional function of selling, but also to the newly emerging roles this department is now responsible for. As stated above, the sales department function is not limited only to generating revenue. So when planning the design of that department a variety of factors should be included (Abed and Haghighi, 2009).

A primary factor influencing a successful sales structure is determining the distribution of labour tasks within the department. In other words the division of responsibilities, namely how the sales force will be organised. As a secondary, but still with high importance, the factor to be considered is the choice of distribution channels. Those channels determine how actual sales are going to be executed and, how the organisation will establish communication with customers and are also known as sales channels (Smith and Rupp, 2003). Often, the structural design planning comes to an end with decisions made only with regard to those two factors, thus potentially threatening the future success of the organisation or not maximising the potential opportunities that it possesses.

Scholars and practitioners are broadening the factors that require planning and inclusion within the sales department structure, by adding consumer and organisational buying behaviour. The buying behaviour of the targeted customers (regardless of whether they are organisations or individuals) was required to be tracked in order to properly choose the appropriate sales channels. This is a primary prerequisite for the successful choice of a sales strategy and its alignment with the local circumstances (DiModica, 2006). The choice of sales strategy is accompanied by a decision, regarding the orientation of the organisation, whether to be product or market oriented. This decision is a milestone that will shape not only the structure of the sales department, but also the organisation's structure and how it grows and develops. Furthermore this decision defines the sales techniques that will be used in the day-to-day operations of the sales staff (Dalrymple *et al.*, 2004). Chosen sales techniques are reflected on the set of characteristics the employees (sales force) are required to have. Furthermore, constructing such a set of characteristics enables the organisation to design an appropriate recruitment and selection program, since the main parameters (personal characteristics, job design, and strategy) will be available. From this, it can be concluded, how to train and subsequently motivate the sales force, which is a supporting factor for the establishment of appropriate performance monitoring system for the evaluation of the sales force (Donaldson, 2007).

This variety of factors influencing the design of a sales department underlines its complex nature. These factors are prerequisites for further investigations into the culture of the sales department and its structure. Scholars agree that the first step to be taken for a newly formed company, when designing its sales department structure is whether it will be product oriented or market oriented, as every decision thereafter will be made based on that fundamental choice (Donaldson, 2007; Futrell, 2011; Dalrymple *et al.*, 2004). Of course, the proposed philosophies are not the only available ones; there are financially oriented organisations, seeking short-term returns and justifying their decisions with the use of financial ratios rather than customers' feedback. Another alternative is to consider sales orientation, which refers to a situation in which the organisational aim is to generate as many sales as possible, instead of concentrating on understanding customers' needs (Spiro *et al.*, 2007). For the purpose of this study, product and marketing orientation philosophies are taken into consideration, since they are the most circulated practices in the trading and manufacturing sectors (Jobber, 2010).

The product orientation approach is related mainly to costs. In such organisations, management becomes highly cost-focused, and the primary function of its work is perceived as mitigating costs by adopting economy-of-scale practices. Another characteristic of the product-orientated approach is the inner focus on the quality of the product, again its cost and aggressive selling. The organisation's purpose is to manufacture products (in the case of commercial companies, their purpose is to sell, thus this concept overlaps the concept of sales orientation; consequently, the older term, product orientation, is more generally used) (Spiro *et al.*, 2007). On the other hand, the definition of market orientation is related to achieving organisational goals by meeting, or even exceeding, customers' expectations better than the competitors (Zain, 2012). This approach comprises three major conditions that need to be met, namely, customer orientation, where the organisation focuses on providing customer satisfaction rather producer convenience; integrated effort, - where all staff members, whether the CEO or the cleaner, accept the responsibility of providing satisfaction to the customers; and understanding and belief, - where the staff perceives the customers' satisfaction as a channel for achieving corporate goals. Marketing-oriented approach is related mainly to providing customer satisfaction and at the same time constantly observing the market and looking for new opportunities enabled by changes in market trends, customer preferences, and emerging technologies (Futrell, 2011). Jobber (2010) provides an excellent comparison between product and market orientation, with two examples. In the first one, the steam engine producer Pollitt and Wigsell are discussed. They used to produce high-quality steam engines sold to the textile industry, this was product oriented, focusing on cost cutting and quality improvements. Thus, they failed to take into account the emergence of new technologies, such as the electric motor, and went out of business. In comparison, a power loom producer, market oriented, managed to see the opportunities offered by the emerging markets, selling its state-of-the-art G power loom patent and investing in newly formed car industry, achieving tremendous success. This company is called Toyota.

Market-oriented organisations can therefore be said to possess a superior advantage. Jogaratnam and Tse (2006) criticise this view by stressing the advantages of the product-oriented approach in the manufacturing sector, giving the example of Asian manufacturers becoming more competitive by using the economy of scale and cost-focusing methods. In their study, they also provide evidence for more inner-oriented organisational structure within the hotel industry (service industry), thus proving that such orientation could be successfully used within organisations other than manufacturing. However, Pelham (2002) explains that in the 21<sup>st</sup> century, the customer has significant buyer power and is able to choose among a variety of comparable products/services. Consequently, managerial staff and especially the sales force should be re-oriented, becoming more consulting focused, which leads to improved understanding of customers' needs. He suggests that in industries offering more complex products/services (for example, high-tech products and IT-oriented services), such marketing-oriented approach is required.

Yet academics and practitioners agree on the importance of organisational orientation, being the milestone of further development (Zain, 2012; Futrell, 2011). They advise that such a decision needs to be supported by arguments related to the specific industry of operation, aims and purposes of the organisation, and its creators' vision for future development. Often, this orientation is neglected when designing the organisational and sales department structure. Usually, it emerges operationally in relation to the requirements of the market. This is a prerequisite for failure of the organisation or inability to fully utilise the opportunities offered by the market environment (Jogaratnam and Tse, 2006; Spiro *et al.*, 2007). This important factor is followed by the actual structure of the sales department, namely, the division of labour tasks (Ingram *et al.*, 2005). Most sales

department structures can be divided in four types: line structure, line and staff structure, functional structure, and horizontal structure. They are part of the generalists' type of sales structure, where the labour division is broader. There is an on-going dispute between scholars and practitioners regarding the sales force specialisation continuum.



Source: Ingram *et al.*, 2005

According to Galbraith (2012) the innovative structuring of an organisation, mixes the best practices available and aligns them with the specific market or product needs, managing to extract maximum benefits. Furthermore, that structure incorporates the increased importance of customer-centric policies attempting to establish, along with the product and geographical structure, improved understanding regarding the customers that the organisation serves, when it comes to trading (commercial entities) or manufacturing companies. Parvatiyar and Sheth (2001) explain that understanding customers is the first step towards the establishment of a successful retention policy. In today's dynamic economic environment, with saturated markets and major technology shifts, customer retention is a key element in a company's strategy of gaining competitive advantage. This is explained by Gummesson cited by Egan (2011) as the acquisition of a new customer costing 5 to 10 times more resources compared with retaining an existing one. This notion, accompanied by building loyal long-term relationships, in-depth feedback, and understanding of customers' needs, makes the adoption of a CRM policy a desirable goal for many organisations (Ballard, 2008). In fact, the successful adoption of such a policy/strategy is related to the organisational and, in particular, to the sales structure, as being the main bridge establishing the two-way communication with customers (Newell, 2003; Roberts-Phelps, 2001; Brown 2000). Furthermore, the authors defending this thesis argue that each structure type could comprise aspects incorporating customer-centric policy. Specifically, the structure could be seen as an obstacle, but through modification, increasing employee awareness of customer satisfaction, and adoption of technology, it becomes CRM-capable. A primary obstacle for adopting a CRM strategy that emerges from a number of studies (see, for example, Newell, 2003; Roberts-Phelps, 2001; Brown, 2000; Becker *et al.*, 2009; Pop *et al.*, 2010; Nasir *et al.*, 2008) is the human factor, especially the employees' personal character. Robert-Phelps (2001) initially described CRM as a mind-set, which is the main reason for failure when implementing it. Another example is the employees' misunderstanding of the concept of customer satisfaction as a primary approach towards fulfilment of organisational goals. Furthermore, they do not understand the values of a CRM-driven company, which blocks the employees from applying them (Liu and You, 2011; Yao, 2012), thus reintroducing the important role of the recruitment and training departments (Abduli, 2013). In the beginning of this section, the importance of the recruitment and training programme within the sales department structure design was recognised. The notion of Liu and You (2011) and Yao (2012) regarding the effect that this programme has on the successful implementation of the customer-centric approach reconfirms the major role that recruitment and training occupy within the sales department structure. Although several examples of sales department structure have been provided, they are particularly focused on multinational or large companies and are thus not fully applicable to the case of SMEs.

## MANAGERIAL IMPLICATIONS

This paper has considered the varieties of organisational structures with implications for the general approaches used by companies, regardless of their industry sector (Jabnoun, 2005; Burnes, 2000; Tushman *et al.*, 2012). The growing importance of the organisational structure results in the emerging complexity of international corporate structures, whose complexity is also transferred to SMEs (Galbraith, 2012). An example of the emerging complexity within corporate structure is the four-pillar complex organisational structure that P&G has adopted. It includes Chief Financial Officer (CFO) responsible for the HR, financial, legal, and business development (first pillar) and, Vice President for the departments divided by product type (second pillar). There is also a geographic division controlled by the Chief Operations Officer (third pillar) and division by customer type led by another Vice President (fourth pillar) which are far too vague and difficult for employees to understand. Yet, further criticism could be the slow implementation of innovative strategies and technologies in such complex, and often cumbersome, organisations (examples for such is Mobiltel EAD, a Bulgaria-based telecommunication company that failed to adopt the SAP ERP system), which might result in loss of competitiveness (Galbraith, 2012; Futrell, 2011). Furthermore another issue arises from the debate on the complexity of the organisational structure, related to the span of control. According to Blackenship and Miles (1968), clear organisational structure is perceived easier by the employees (compared with more complex structure), and prevents any confusion with their own functions. Consequently, the work of the managerial staff monitoring the performance of those employees is less arduous. Contrariwise, the implementation of technology is pointed out as a tool that will cover the monitoring gap within the complex structure and will give innovatively structured organisations significant competitive advantage, avoiding the traditional way of structuring.

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# THE TWO FACES OF ONLINE SOCIAL GAMBLING: THEORETICAL IMPLICATIONS FOR MARKETING COMMUNICATIONS

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## ABSTRACT

*Gambling has been a part of humanity for a very long time and references to it have been found in some of the earliest dated records. Literature on the topic has been accumulating since ancient times. The advent of internet technology, along with its typical subsets provides a new twist on how gambling is conducted in postmodern times. Drawing on qualitative research, the current study examines online social gambling and real money gambling marketing communication practices, and offers some insights on the development and implementation of effective marketing communication programmes. In contrast to existing studies, the paper, in part, proposes integrative and higher levels of marketing communication programmes between online social gambling and real money gambling environments.*

**Keywords:** Social Gambling, Real Money Gambling, Online Gambling, Internet Gaming, Marketing Communication, Consumer Buying Behaviour, Qualitative Research.

## INTRODUCTION

As profit driven entities, internet gambling companies (also referred to as 'online gambling' and 'real money gambling online' in this study) are seeking expansion into a rapidly growing online social gambling industry (Yakuel, 2013; Chang and Zhang, 2008). A few of the large internet gambling companies and social gambling companies have already started spending millions of dollars trying to fight for market share; while other gambling companies and social gambling companies have begun building strategic alliances (Johnson, 2013). These actions have sparked controversy within the industry in terms of how companies should handle both markets (Schneider, 2012; Goode, 2013; Morgan Stanley, 2012). This controversy, combined with limited research within the social gambling industry, has left industry leaders and scholars with different ideas about how to understand the business models of the social gambling and internet gambling industries, and more specifically, whether or not to merge them together or keep them separate (Schneider, 2012; Goode, 2013; Collson, 2012a; Rogers, 2013; Morgan Stanley, 2012). This has spawned debate amongst government officials about whether or not social gambling online can actually be considered 'gambling' and whether or not they should step in and regulate the online social gambling market (Alaeddini, 2013; Cohen, 2013). Furthermore, authors also have different perspectives about online gaming and there appears to be no clear definition of what online gaming entails (Yee, 2006; Raylu and Oei, 2002; Jieun, et al., 2011; Schneider, 2012). More specifically, Yee (2006) and Kaye (2012) claim online gaming involves playing traditional video type games online; while Owens (2010) and Alaeddini (2013) suggest that internet gambling games are forms of online gaming; and Jieun, et al., (2011), Roche (2012), and Odobo (2013a) suggest that the definition also includes the relatively new industry social gaming (including social gambling).

The advantage for internet gambling companies is they can exploit marketing opportunities within the unregulated social gambling industry that they can no longer do within the regulated internet gambling industry. The social gambling industry is unregulated in over 99% of countries globally, primarily because it is currently not considered to be gambling (Morgan Stanley, 2012). More specifically, some social gambling sites do not allow real life monetary value for their virtual currency (play money gambling chips), while other social sites do not accept payments (wagers) from players for prizes won. Either way, both strategies eliminate one of the three key elements for something to be considered gambling (UK Gambling Act, 2005). This allows real money gambling sites direct access to players where local governments have placed legal restrictions for internet gambling marketing communication programmes and consumer buying.

At a recent gambling conference in London, some industry experts stated that social gambling and real money gambling businesses should not be viewed as identical entities but should be viewed separately as each has a unique business model (Goode, 2013) and social gamblers and real money gamblers have different motives for playing (Choi and Kim, 2004). In addition, 98% of social gamblers are not willing to spend any money at all, and therefore, cannot be converted into profitable real money gamblers (iGaming Business, 2013). This data is consistent with Chang's (2010) case study, which also states that 98% of social players online are not willing to spend any money.

Other industry leaders feel differently and view both business models as a perfect fit for each other. For example, Zynga, the global market leader for social games and social gambling games online, has teamed up with BWin.Party, currently one of the largest real money gambling companies online, and entered the UK real money gambling industry in April 2013 using the social gambling brand Zynga Poker (Collson, 2012a; Pitt, 2013). Other recent examples of convergence between real money companies and social gambling companies include: 1) Facebook teaming up with 888 Holdings PLC, another one of the world's largest online gambling companies, to offer a real money gambling platform on Facebook in 2013 (Collson, 2012b) and also teaming up with Gamesys Software to launch a real money bingo platform (Church-Sanders, 2012) on the Facebook platform; 2) The \$500 Million US acquisition of the third largest social casino site, Double Down Interactive, by International Game Technology (IGT), making this the largest deal of its kind to date (Wall Street Journal, 2012); and 3) Caesars Entertainment, one of the largest casino companies in the US, is currently ranked number two in the social gambling market share after it purchased the social gambling software company Playtika in 2011 (Tsipori, 2011; Morgan Stanley, 2012). By forming these strategic alliances (the merging of a social network/gambling company with a real money gambling company) core competencies and economies of scale can be shared to increase the chance of success while also minimising risks (Rogers, 2013).

These latter beliefs of industry experts are in parallel with data found in a recent report by Morgan Stanley (2012). The report suggests that both the online gambling and social gambling business models are a perfect fit for each other. More specifically, total value is created from the difference between the customer acquisition cost and the customer lifetime value. In addition, the report suggests there are three key stages in the similar business models: 1) Acquire Customers; 2) Retain Customers and Drive Engagement; and 3) Monetise Customers. Moreover, the Morgan Stanley (2012) report presents a gap within the literature, which is that the forecasts are based strictly on numbers and percentages. For example, the report states that the conversion of customers from social gamblers into real money gamblers could increase the real money gambling industry by 20%-30% if only 10% of social gamblers convert. The report further reveals that because 2% of social gamblers are willing to spend money on a social gambling game (e.g. buy virtual currency/gambling chips or unlock the next level of game play) a percentage of them would be willing to spend money on a real money gambling site (Morgan Stanley, 2012). However, the report produces no evidence from previous or current research that examines the conversion of a social gambler into a real money gambler using traditional real money marketing communication programmes to justify their claims. Furthermore, the report states that both business models are identical, but reveals no links between a social gambler's and a real money gambler's buying behaviour. With this in mind, the current paper aims to provide some insights on how marketers could effectively communicate with these segments based on their differing needs.

## **THEORETICAL FOUNDATION AND CONTEXT**

Online gaming is an umbrella term used for various types of games played on the internet, including, video/PC games, social games and gambling games; and depending on the author's disciplinary background or perspective, the definition of online gaming varies from one to another (Yee, 2006; Raylu and Oei, 2002; Jieun, et al., 2011; Schneider, 2012). For example, authors who have conducted research on the video and PC game industry use the term 'online gaming' for players who play video games through a network (usually the internet) on a games console such as a Play Station, a Personal Computer (PC) such as in the form of Counter Strike or Monopoly, or on a tablet or mobile phone (Yee, 2006; Kaye, 2012). Online gaming in this context does not include real money gambling games played online, due to the different financial investment and experiences (Kaye, 2012; Alaeddini, 2013).

The online gambling industry has included itself within the umbrella of the term online gaming. The primary reason for this is that the word 'gambling' in online gambling can have a negative effect on some people because they consider gambling to be a taboo form of entertainment (Carey and Carey, 1984) and offensive (Prendergast and Hwa, 2003). Therefore, the online gambling industry uses the term online gaming but includes casino type games played online as well (Owens, 2010; Alaeddini, 2013). This allows them to have a more positive image when referring to the online gambling industry. The term social gaming, a relatively new form of online gaming, refers to games distributed on social networks that can be played solo or against other people via social network sites (Jieun, et al., 2011; Roche, 2012; Odoobo, 2013a). Unlike traditional video games, social games are generally easier to play and focus more on allowing people to interact with friends rather than focusing on amazing graphics and fast hand-eye coordination movements (Lacy, 2009; Chang, 2010).

Therefore, for the purposes of this paper, the definition of 'online gaming' will include all game types (both gambling related and non-gambling related, including the wagering of real money, virtual money, or no money wagering), which are played online (including through a social network/media platform played solo or multiplayer) via a computer, a laptop, a game console, a tablet, a mobile phone, or any other digital device that has internet access and game play capabilities. This study is primarily focused on two segments of the online gaming industry: 1) Social Gambling Online (under Social Gaming) and 2) Real Money Gambling Online (under Online Gaming). Both segments will be further defined below together with a discussion of the various motivations and behaviours of the players.

## **Social Gambling Online**

Presently, there is no clear accepted definition for what social gambling entails (Griffiths, 2013; Schneider, 2012). Most studies have researched the social gaming industry as a whole, as opposed to researching social gambling as a specific phenomenon (Schneider, 2012). The primary reason for this is that social gambling is a subpart of social gaming. Consequently, limited research has been conducted specifically on the online social gambling industry and its players.

According to Schneider (2012) and Yakuel (2013), social gambling is based on virtual currency, which means players pay real money to buy valid online currency (called virtual currency) to play a particular game. Virtual currency can also be used for goods and services, and to advance to the next levels of the game, but it cannot be exchanged back into real money. This is a very narrow definition of social gambling, as it does not mention the free play aspect. Geron (2011) expands on the purchasing of free goods and virtual currencies observed by Schneider (2012) by also mentioning that players can play games for free without the need to pay. Jieun, et al. (2011) produced research that developed on Geron's (2011) definition by stating that social games (including gambling type games) are distributed on social networks which can be played solo, or against other people via social network sites. Chang (2010) mentions that social games have different social levels, for example, Zynga's social gambling game Texas Hold'em Poker has some social components such as chatting, but players usually interact with strangers. Mob Wars, on the other hand, has a higher level of social interactivity because players do better if more of their friends join their 'mob clan'.

However, none of these studies make a distinction between social gaming online and social gambling online. Gambling Data (2012) and Odoobo (2013a) state that social gambling games mimic traditional casino gambling games but are not considered as forms of 'gambling' primarily because players can pay money into the game but can never make a withdrawal and the virtual currency purchased has no real life monetary value

(Huang, 2012). The idea of paying money into the game but not being allowed to withdraw it resonates with Schneider's (2012) definition.

Therefore, for the purpose of this paper, social gambling online will include all aspects of social gaming but with the caveat that the definition only applies to the games that are gambling related. This study defines 'gambling related' as referring to every game that can be found within a casino-style licensed gambling establishment. According to Rose and Owens (2009a) this includes, but is not limited to: casino-style table games (e.g. blackjack, craps and roulette, slot machines, video poker machines, and the card game poker); lotteries; parimutuel betting on horse and dog races; sports betting; and banked and non-banked games.

## **The Drivers of Online Social Gamblers**

In general terms, authors have defined motivation as a force that drives people to take action, which can differ both in terms of levels of motivation and in terms of specific types of motivation (Schiffman, et al., 2010; Ryan and Deci, 2000). Furthermore, Vallerand's (1997) research revealed that different kinds of motivations lead to different affective, behavioural and cognitive outcomes.

Understanding the motives that drive social gamblers online is important because motives determine choice criteria (Jobber, 2010). In addition, understanding the motivations and behaviours of an online social gambler is key information not only for researchers, but also for marketers and game developers (Jieun, et al., 2011). For this study, it is important to identify the motivations of social gamblers in order to determine if there are any similarities to the motivations of real money gamblers online. However, there has been limited research conducted on the motivations and behaviours of social gamblers online, and therefore, to help aid the understanding of this topic, this study will draw upon previous literature that has been conducted on the motivations and behaviours of an online social gamer.

Previous literature on online social gaming focuses keenly on motivation and its role in determining player behaviour (Choi and Kim, 2004; Yee, 2006; Lampe, et al., 2007; Kim, et al., 2011). For example, Jieun, et al. (2011) examined: why people play online social games; how different types of motivations influence their attitudes toward playing social games; and people's intentions to engage in various online social game activities. They were able to identify six motivations of players and these are: 1) social interaction, 2) self-presentation, 3) fantasy/role playing, 4) passing time/escapism, 5) entertainment, and 6) challenge/competition.

In addition, 'the findings demonstrated that different types of motivations influenced attitudes toward playing [social games] and intentions to engage in different social network gaming activities differentially' (Jieun, et al., 2011, p.643). Four out of the six motivations that were identified in this research (social interaction, entertainment, passing time, and self-presentation) are also consistent with the four most frequently identified motivations from previous social network and social gaming literature (Mehdizadeh, 2010; Lampe, et al., 2007; Kim, et al., 2011).

However, other authors who have measured player motivations have categorised them differently. For example, Yee (2006) categorised player motivations into three main components and subcomponents as follows:

- 1) Achievement Component - with subcomponents: (a) Advancement (i.e. in-game rank reputation); (b) Mechanics (i.e. next phases in the game architecture); and (c) Competition;
- 2) Social Component - with subcomponents: (a) Socializing / Relationships / Teamwork;
- 3) Engagement Component - with subcomponents: (a) Discovery (i.e. discovering the games atmosphere); (b) Role-Playing (i.e. assuming/changing into a different character); (c) Customization (i.e. customizing their character/avatar); and (d) Escapism (i.e. leaving the real world environment).

In addition, Chang and Zhang's (2008) research suggests that players will be much more motivated to play social games if the games they are playing are fun and if they facilitate a form of escape from routine everyday life. Zanetta, et al. (2011) agree with Yee's (2006) three main components but they also found that a strong motivational level of achievement, escapism, and socializing are predictive factors of social gaming addiction. However, motivational factors for social gaming addiction go beyond the scope of this study.

Playing social games online makes constant demands on a player's attention (Buchanan, 2005). Furthermore, with regard to player behaviour, research by Shin, et al. (2011), in a study that examined the perceived factors that contribute to a social gamer's behaviours; found that perceived playfulness and security are two key factors that play an important role in predicting a player's attitude towards their intention to play a social game. It has been suggested that a possible driving force behind the motivations of a social gambler is that they live in a jurisdiction where real money gambling online is currently illegal, and therefore, players have no choice but to play a social gambling game because there is no alternative (Johnson, 2013). However, there is also a paucity of research in this area to support this statement.

These previous studies produce a good understanding of motivations to play a social game. However, none of them address what motivates social players to purchase virtual goods or currencies. It is important therefore to explore what motivates a social player to buy virtual goods and currencies. As previously mentioned, Morgan Stanley (2012) believes that because 2% of social players are willing to spend money on a social game, a percentage of them would be willing to spend money on a real money gambling site. Research by Huang (2012) suggests that there is growing evidence of virtual goods consumption, but it also mentions that few studies have researched this area to provide sound evidence.

Research by both Schau and Gilly (2003) and Jieun, et al. (2011), found a strong link between the player's motivation for making a strong impression on other players by playing social games online to their intentions of purchasing virtual goods and currencies (such as to send player gifts). In addition, Schau and Gilly (2003, p.385) specifically state that 'consumers make their identities tangible, or self-present, by associating themselves with material objects and places', even in the virtual world online.

## Real Money Gambling Online

Gambling has been a part of humanity for a very long time and references to it have been found in some of the earliest dated records. Literature on the topic has been accumulating since ancient times (Carey and Carey, 1984). In order to clarify what real money online gambling is, it is important to first define what gambling is. Given the long history behind gambling, most literature defines it at a broad level (Scholes-Balog and Hemphill, 2012; Raylu and Oei, 2002; UK Gambling Act, 2005). Where the gambling definition differs is within the legal context, more specifically, what each country, state or province will allow within their jurisdiction, and how they define each of the elements of gambling, from a legal perspective.

For example, for something to be considered gambling under common law, the activity must satisfy three elements: (1) consideration, (2) chance, and (3) prize (Kelly, 2000; Rose and Owens, 2009a). If any one of these elements is missing, it is not considered gambling (Rose and Owens, 2009a). It is how each jurisdiction defines, for example, what consideration or chance is that makes gambling different from country to country. In its broadest form, the UK Gambling Act (2005) defines gambling as playing a game of chance for money or a prize. Raylu and Oei (2002) expand on this definition and state that gambling is placing a wager on a game or event that has an outcome that is to some degree determined by chance. Scholes-Balog and Hemphill (2012) split up the definition, particularly the 'playing games of chance for money' and 'wagering money on an uncertain outcome' and classify online gambling in two main forms: 1) 'online gaming' (e.g. casino games, poker games, slots); and 2) 'online wagering' (e.g. sports betting and events betting).

This definition of gambling related games is based on literature authored by Rose and Owens (2009a), and is also closely related to the definition provided by The European Commission (2011) report on online gambling. However, the European Commission (2011) report further expands on the definition of the word 'online' (labelled as 'internet' in the report) in online gambling.

The European Commission (2011, pp.13-14) report states that the

*Internet (and other interactive technological platforms, such as m-commerce or [internet protocol television]) are used to (a) offer gambling services to consumers, (b) allow consumers to bet or gamble against each other (e.g. betting exchanges or on-line poker) or (c) as a distribution technique (e.g. to purchase lottery tickets directly on-line).*

Therefore, for the purposes of this report, a 'real money gambler online' is defined as anyone who deposits money into an online casino and places a wager on any gambling related game via the internet in order to win a prize or money.

Many authors have identified that a player's accessibility to gambling related games leads to a stronger motivation to gamble (Jacques, et al., 2000; McCormack and Griffiths, 2012; Griffiths, 2003; Wood, et al., 2007a). Accessibility to gambling increased when gambling became available online (Wood, et al., 2007a). However, given the common agreement on accessibility, authors have assigned different priorities to the factors that motivate players to gamble online (McCormack and Griffiths, 2012; Hopley and Nicki, 2010; Griffiths, 2003). For example, McCormack and Griffiths (2012) identified one major theme and four subthemes to describe the motivations for players to gamble real money online. The major motivational theme found was labelled 'greater opportunity to gamble' (i.e. increased accessibility) and the four sub-motivational themes found were labelled: convenience, value for money, greater variety of games to play, and anonymity. These findings are consistent with some of the motivational elements found in a study conducted by Griffiths and Barnes (2008) who identified ease of access, flexibility of use, 24 hour availability, large gambling game selections, and anonymity as motivations for gambling online. These elements share common ground with the themes and subthemes identified by McCormack and Griffiths (2012). In addition, Griffiths and Barnes (2008) suggested further motivations as 1) promotions and advertising; and 2) gambling because family and friends gamble online. Cotte and Latour (2009) also found anonymity to be a key motivational factor. However, Hopley and Nicki's (2010) study identified different motivational reasons for gambling online and 'winning money' was identified as a key motivator. Their study also identified other motivational reasons which, ranked in order of importance, included: developing player skills, feeling lucky, the enjoyment gambling brings, relaxation, escapism, excitement, to relieve boredom, the nature of competition, the challenge, and being able to socialise.

These different opinions amongst authors on real money gambling motivations online present a gap within the literature. The differences in opinion and findings from previous literature come from the limitations of each of the studies (Griffiths, et al., 2009; Gainsbury, et al. 2012; Hopley and Nicki, 2010). For example, Griffiths, et al.'s (2009) study was based on a sample of 476 participants who gambled online. The sample was taken from 9,003 participants in the 2007 British Gambling Prevalence Survey. Their research studied a vast number of different types of online gamblers and their motivations, but it only focused on UK players. Gainsbury, et al. (2012) conducted behavioural analysis research on the betting patterns of 11,394 online gamblers. Player account data and betting pattern data were used for the analysis, but this study was limited to only one gambling website within the Australian market. Hopley and Nicki's (2010) study was even more limited in numbers and focus. The study had 179 participants and focused only on poker players online, and 85% of the subjects were European/Caucasian. In addition, the participants were self-selected from poker forums and network sites and were also considered to be highly experienced players. This prevents the findings from being generalised to the motivations of all real money gamblers online.

## **MANAGERIAL IMPLICATIONS AND CONCLUSION**

We have investigated the relationship between social gamblers and money gamblers within the evolving technological environments. The analysis reveals that developing effective marketing communications programme requires deeper understanding of consumers' level of participation within these environments. Extant studies on social gambling and real money gambling online tends to support the industry leaders and scholars who believe social gambling and real money gambling should be kept separate (Goode, 2013; Yakuel, 2013). Hopley and Nicki's (2010) study of the predictive factors of excessive real money poker playing online was the only study that identified similar motivations to social gambling motivations. In contrast, other research into player motivations to participate in social gaming online and real money gambling online identified a few closely matched similarities (Jieun, et al., 2011; Yee, 2006; Zanetta, et al., 2011; Chang and Zhang, 2008; McCormack and Griffiths, 2012; and Griffiths and Barnes, 2008). Furthermore, these studies were conducted on online gaming (video gaming) and social gaming players and not directly on social gambling players (Choi and Kim, 2004; Jieun, et al., 2011; Yee, 2006; Zanetta, et al., 2011; Chang and Zhang, 2008). The motivations identified by Hopley and Nicki (2010) for real money poker players online that share commonalities with social gaming players online are: escapism, competition, the challenge, and being able to socialise (Jieun, et al., 2011; Yee, 2006; Zanetta, et al., 2011; Chang and Zhang, 2008). However, all of these motivational elements were

found in only 5% or less of players. Ironically, the similarities of player motivations of the Hopley and Nicki (2010) study could be explained because some of the participants were chosen from social networking sites. However, the study makes no distinction between how many participants were chosen from social networking sites versus online poker portals. Wood, et al.'s (2007b) study resonates with the Hopley and Nicki (2010) study since socializing and escapism were identified as motivation factors, but less than 10% of players in this survey identified it as an important factor. Furthermore, both of these studies targeted online poker players only, which makes it hard to generalise the findings to all social gambling and real money gambling games or players.

In addition, the primary demographics of social gaming players and online gambling players do not match (Griffiths, et al., 2009; Gainsbury, et al., 2012; Wood and Williams, 2009; Ovans, 2012; Qualman, 2012; Hepburn, 2012). There is consistency in the literature amongst the demographics of real money gamblers online, which is about 76% male with a stronger presence in younger males (Griffiths, et al., 2009; Gainsbury, et al., 2012; Wood and Williams, 2009). These demographics match previous clinical studies on offline real money gamblers which also found a male predominance (Martinez, 1983; Galski, 1987). Consequently, the social gaming demographics are approximately split 50/50 amongst men and women, with women over the age of 55 identified as the primary online game player segment (Ovans, 2012; Qualman, 2012; Hepburn, 2012). Furthermore, males tend to engage in gaming for hedonic reasons while women do so mostly for self-efficacy (Lan, et al., 2013).

There are few similarities between the consumer buying behaviour patterns of social gamblers online and real money gamblers online (Lan, et al., 2013; Huang, 2012; Animesh, et al., 2011; Gainsbury, et al., 2012; Sevigny, et al., 2005; McCormack and Griffiths, 2012; Griffiths, et al., 2005; Griffiths, 2006). Authors have identified that social gamblers will increase buying consumption for the following reasons: 1) time spent playing the game before they decide to buy; 2) to establish a social identity; and 3) increase of social player interaction with other players (Lan, et al., 2013; Huang, 2012; Animesh, et al., 2011). However, research from real money gamblers found that consumer spending happens when: 1) consumers are losing money; 2) consumers are winning money; and 3) consumer's judgment of monetary value of real money has been temporarily altered (Gainsbury, et al., 2012; Sevigny, et al., 2005; McCormack and Griffiths, 2012; Griffiths, et al., 2005; Griffiths, 2006).

To justify the claims of industry leaders that social gambling online and real money gambling online should converge (Collson, 2012a; Pitt, 2013; Tsipori, 2011; Morgan Stanley, 2012), this study will draw on a specific finding from a recent report conducted by Yakuel (2013) and look at it from a reverse perspective. Yakuel's (2013) study used company data and software to analyse the difference between social gamblers and real money gamblers and the study identified numerous differences between player behaviours and motivations with no commonalities. However, one of the differences that this study identified was player engagement levels, on which where he further elaborated (Yakuel, 2013, p.72):

*social gamblers are nine times more likely to engage in playing social gambling games than real money gamblers are to play real money games, because social gaming takes place on social networks where the game visibility is high, for example: 1) players are continuously bombarded with game updates and promotions in their news feeds; 2) players are interacting (i.e. chatting) with their friends who also play the social games; and 3) players can see if their friends are currently playing games online. Contrarily, because real money gamblers online play via a computer or tablet, in order to interact with the game the player must visit the website or receive an email reminding them to play.*

Therefore, combining this finding with one of the real money casino's cardinal rules, *keep players playing and keep players coming back because the odds in gambling games are favoured towards the house* (Ma, 2010; Norton, et al., 2011; Thompson, 2001), one can surmise that the reason real money gambling companies would advocate entering the social gaming market is because they may be able to increase player engagement using social gaming platform techniques that social gaming companies use. Furthermore, as previously stated, authors have found a strong link to a real money player's accessibility to gambling related games causing a higher motivation to partake in the games (Jacques, et al., 2000; McCormack and Griffiths, 2012; Griffiths, 2003; Wood, et al., 2007a).

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# THE INTERPLAY OF SOCIAL MEDIA AND CUSTOMER RETENTION

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## ABSTRACT

*Social media has become an integrated part of everyday life, but its entry into the luxury goods industry has been far from easy. The use of social media in the luxury beauty industry has caused many heated debates as it is seen as a form of interference in the exclusivity of luxury brands by limiting the physical and sensual contact between brand and customer. The purpose of this paper is to provide some insights into how social media impacts on the cosmetics industry. Further, we provide evidence that the effective application of social media in the luxury beauty industry could lead to wider market share, and customer retention. The paper concludes with some strategies that practitioners and researchers can adopt to develop effective marketing communication strategies, using social media platforms.*

**Keywords :** Social media, customer retention, luxury beauty industry, marketing communications, word of mouth, loyalty.

## INTRODUCTION

The concept of social media and its relevance to effective marketing communications has gained much attention (Bolton *et al.*, 2013; Brennan & Croft, 2012; Hamid, Akhir & Cheng, 2013; Hanna, Rohm & Crittenden, 2011; Hoffman & Fodor, 2010; Mangold & Faulds, 2009; Ozuem & Tan, 2014). The evolution of social media has led to the democratisation of corporate communications, with power shifting from advertising departments towards the opinions of individuals and communities, who like or dislike, comment upon and share content (Kietzmann, Hermkens, McCarthy & Silvestre, 2011; Dann & Dann, 2011). The online social landscape has converted the standard one-to-many media monologue into many-to-many dialogue. Social media has increasingly become a product of consumers (Berthon, Pitt, Plangger & Shapiro, 2012). Online conversations have become the new fuel and forefront of customer-firm relationships. Practitioners of the Cluetrain Manifesto (Levine, Locke, Searle & Weinberger, 2011) even describe conversations as “new products” that are part of a marketplace of organisations that permanently pitch to each other. As the rise of social media offers great opportunities to connect with consumers, Mangold and Faulds (2009) have made a case for the long-term incorporation of social media in a company's integral Marketing Communications strategy.

Bain & Company (2013), the leading strategy consultancy in the global luxury goods industry, expects the worldwide market of luxury goods to continue its double-digit growth, accounting for a total of £208 billion sales by 2015. In the UK specifically, the Walpole (2013), a non-profit association representing more than 180 British luxury brands such as Harrods, the Royal Opera House and Selfridges, reports an estimated growth of 12 per cent in the UK luxury industry, reaching an estimated record of £11.5 billion in the year 2017. With regard to beauty in particular, the global luxury beauty market outpaced mass-market beauty growth by 1.6 per cent in 2012 (BW Confidential). The luxury beauty industry in the UK is especially unique, as the nation's beauty market grew by 5 per cent to £2.2bn in 2012, propelling the UK to the third biggest luxury beauty market in

Europe after France and Italy (Euromonitor International, 2013). The luxury beauty market in the UK is forecasted to be the fastest growing developed market in Western Europe with a growth rate of 6 per cent over the next five years, compared with an average growth of 2 per cent in the region (Euromonitor International, 2013).

The rise in the standard of living and consumer education about products has led to a democratisation of what were originally considered the most exclusive products (Garland, 2008). Globalisation has furthermore contributed to an increased level of competition, leading companies to create more exclusive products in order to differentiate from each other (Vickers & Renand, 2003). Many companies seek to add value to their brand by simply adding the term “luxury” or by extending their product portfolio with a luxury range, whilst others have created a truly luxury-oriented brand as their core business proposition. This study focuses on the last group, luxury brands that authentically carry the original meaning of luxury.

The growing desire of consumers for exclusivity and personalisation motivates luxury retailers to strongly invest in beauty. Evidence for this can be seen in for example the new “Beauty Workshop” area in Selfridges, the recently opened “Beauty Mart” section in Harvey Nichols in London or the new Luxury Beauty store on Amazon. Nowadays luxury beauty brands increasingly use social media to give consumers a more actively engaging brand experience. Despite the growing popularity of online shopping, so far only one in five women purchases beauty products via the Internet and many consumers are still uncomfortable about buying beauty products online, as the preference to explore, assess and test the products prior to purchase still holds true (YouGov, 2012)

Social media has become an integrated part of everyday life, but its entry into the luxury goods industry has been far from easy. The use of social media in the luxury beauty industry has caused many heated debates as it is seen as interference to the exclusivity of a luxury brand by limiting the physical and sensual contact between the customer and the luxury brand (Choo, Moon, Kim & Yoon, 2012; Dall’Olmo Riley & Lacroix, 2003; Dubois & Paternault, 1995; Khang, Ki & Ye, 2012; Okonkwo, 2010; Seung-A, 2013; Smith, 2009). However, as the number of affluent customers purchasing online increases, luxury brands face the challenge of retaining their customer base in order to create more sustainable revenue streams (Bolton, 1998; Buttle, 2009). Companies have reacted to this recent evolution in the marketing landscape and almost every luxury brand has adopted social media to connect with customers (Kim & Ko, 2010). A survey by the Luxury Interactive conference’s research team reported that 78 per cent of digital marketing executives for luxury brands increased their spend on social media in 2012, with 73 per cent of those surveyed planning to further increase their social media spend in 2013 (Alston, 2012).

The last decade has seen the production of a vast range of literature about social media. Topics of preference have so far included communication (Ozuem, Howell & Lancaster, 2008; Quinton & Harridge-March, 2010; Powers, Advincula, Austin, Graiko, & Snyder, 2012), the impact of word of mouth (Kozinets, Valck, Wojnicki & Wilner, 2010; Hennig-Thurau, Gwinner, Walsh & Gremler, 2004; Prendergast & Yuen, 2010), purchase intentions (Naylor, Walker, Cait & West, 2012) and service creation (Jarvenpaa & Tuunainen, 2013; Onook, Manish & Raghav, 2013; Trainor, 2012). Some of the literature focuses on how social media influences customer relations (Katsioloudes, Grant & McKechnie, 2007; Kim and Ko, 2010; Clark & Melancon, 2013; Laroche, Habibi & Richard, 2013; Hennig-Thurau *et al.*, 2010).

Most of these studies have focused on customer loyalty (Clark & Melancon, 2013; Gummerus, Liljander, Weman & Pihlström, 2012; Hawkins & Vel, 2013; Laroche *et al.*, 2013) yet Hennig-Thurau *et al.* (2010) considered that customer retention as the outcome of engagement with new media. Their observations, however, were out-with the context of the UK luxury beauty industry. Blattberg *et al.* (2001) emphasised the need to clearly distinguish between customer loyalty and customer retention. Just because a customer is retained does not automatically imply that the individual is also loyal to a brand. Whereas customer loyalty is a customer reward that occurs once customers have changed their hearts and minds in favour of a particular product or service, customer retention is an organisational reward and focuses on how to keep customers without first having to change their hearts or minds (The Customer Institute, 2010).

Furthermore, Kim and Ko (2010) identified the impact of social media on customer equity, thereby emphasising the correlation between purchase intention and customer equity. Referring to the financially driven

customer equity model as described by Blattberg, Getz and Thomas (2001), customer equity consists of three steps – customer acquisition, customer retention and add-on selling. It can thus be argued that evaluating the impact of social media marketing on customer equity jumps to the end without considering important hurdles in between, such as customer retention. Therefore, instead of directly measuring customer equity or focusing on customer loyalty, this study recommends first analysing the extent to which social media impacts on customer retention. Whilst social media is often viewed as a positive lever in the customer-firm relationship, few studies refer to the luxury industry and fewer yet speak to the context of the UK luxury beauty industry.

Kim and Ko (2010; 2012) have made a substantial contribution to the literature on social media in the luxury market. However, as with many other studies, the researchers primarily focus on the luxury fashion industry (Choo *et al.*, 2012; Kim & Ko, 2010; Kim & Ko, 2012; Jin, 2012; Moore & Doyle, 2010; Phan, Thomas & Heine, 2011). In contrast to the consumption of luxury fashion, buying luxury beauty products involves a high level of pre-purchase testing, which raises the question of whether or not social media provides an adequate tool to retain customers, as product testing is difficult and complex to implement online. This study therefore aims to identify the extent to which social media is a convenient tool to support the retention of luxury beauty customers and in which ways a brand's communication via social media can impact on customer retention.

## THEORETICAL FOUNDATION

The proliferation of social media is closely related to and facilitated by the development of Web 2.0 technologies (Berthon *et al.*, 2012; Brennan & Croft, 2012; Fieseler & Fleck, 2013; Kaplan & Haenlein, 2010; Laroche *et al.*, 2013; Tuten, 2008). The term “Web 2.0” was first introduced by the American media company O'Reilly and can be thought of as a set of technological innovations including hardware and software, which have the aim of empowering the user instead of the firm by allowing for content creation and increased interaction (Berthon *et al.*, 2012; O'Reilly, 2005). While its predecessor, Web 1.0, had already laid the foundation for connecting people online via email and chat, Web 2.0 takes connectivity to another level by providing a variety of tools which enable the user to create, publish and share content and give recommendations to online friends and followers (Atta & Mahmoud, 2012; Evans & McKee, 2010).

This development has allowed for a new and disruptive marketing platform: social media and this was quickly identified as a revolution of the online generation and it has thus attracted the interest of researchers whose definitions bring social media into contact with different aspects such as the power of “social sharing” behaviour (Kaplan & Haenlein, 2010; Jevons & Gabbott, 2000; Nair, 2011; Safko & Brake, 2009; Stokes, 2008), interconnectivity (Dann & Dann, 2011; Hoffman & Novak, 2012; Laroche *et al.*, 2013), influence (Brown & Fiorella, 2013), education (Blackshaw & Nazzarro 2004, Mangold & Faulds, 2009) and comparisons with traditional marketing (Mangold & Faulds, 2009; Zarella, 2010).

The most widespread definition of social media was originated by Kaplan and Haenlein (2010), who suggested that social media refers to a range of internet-based applications that build on the foundation of Web 2.0 and enable users to create and exchange User Generated Content (UGC). UGC is the engine of today's participative web and in order to count as UGC, it must be published, creative and produced outside the professional context (Daugherty, Eastin & Bright, 2008; OECD, 2007). Many researchers emphasise the importance of exchanging and sharing UGC (Jevons & Gabbott, 2000; Nair, 2011; Safko & Brake, 2009; Stokes, 2008), after all the “social” in social media already promises a high degree of contact and exchange with other people.

Stokes (2008) sees the sense of social media in its ability to make users share content. Safko and Brake (2009) develop this further and define social media as a tool that allows users to share information, knowledge and opinions by engaging in online dialogues. On social media platforms, users have the opportunity to create a specific image of themselves, which is maintained through the sharing of posts, pictures, videos, liking certain posts and groups and extending the network of online friends. However, one might have the impression that some users pursue purely narcissistic interests (Nair, 2011), which can then quickly evoke negative attitudes towards users, brands or companies. In addition, the opportunity for self-expression might not be available to such an extent offline (Hoffman & Novak, 2012) and can thus result in some exaggeration of the personal self.

It is undisputed that social media can bring together like-minded people and businesses (Hagel & Armstrong, 1997; Wellman & Gulia, 1999) and hence it satisfies a need rooted deeply in human nature for a sense of belonging, (Maslow, 1943; Gangadharbhatla, 2008). Hoffman and Novak (2012) describe this as another revolutionising aspect of social media, as it is a tool that enables users to connect and re-connect even over long distances. Social media allows for interconnectivity between users and between content and communication technologies (Dann & Dann, 2011). In the context of interconnectivity Tuten (2008) describes social media as an online community categorised as either social networks or virtual worlds that are participatory, conversational and fluid. Significantly, an online community “promotes the individual while also emphasizing an individual’s relationship to the community” (Tuten, 2008, p.20). The motivation to engage in an online community derives from the need for contact comfort, also referred to as a need for affiliation, and a need for entertainment (Tuten, 2008). A brand community in particular is defined as a “specialised, non-geographically bound community, based on a structured set of relations among admirers of a brand” (Muniz & O’Guinn, 2001, p.412). Brands are referred to fundamentally as social entities (Muniz & O’Guinn, 2001) created through the inter-play of consumers and marketers (Firat & Venkatesh, 1995), which can thus be leveraged through the utilisation of social media.

Enabling users to talk to each other can be considered as an extension to traditional word-of-mouth communication (Divol, Edelman & Sarrazin, 2012; Mangold & Faulds, 2009). Amongst online users, some establish a more dominant position than others by sharing more information and opinions and thus procuring more buzz around them. Marketers have quickly discovered the power of targeting social media communities and they recognise that such groups gave rise to a new form of “influence marketing” (Williams & Cothrell, 2000; Brown & Fiorella, 2013). As well as exerting influence, social media also impacts upon persuasive acts, as persuasion is based on social connections and cultural assumptions (Noor Al-Deen & Hendricks, 2012).

Furthermore, the emergence of social media has led to a shift in power asymmetry from the marketer to the consumer, who now has a greater mandate over media consumption than ever before (Vollmer & Precourt, 2008). Social media can spur consumer education about brands, products and services (Blackshaw & Nazzaro, 2004; Mangold & Faulds, 2009, Hoffman & Novak, 2012). Since social media is about sharing, consumers can use the web as a way to educate themselves and to contribute to the education of others within their network. In addition to collecting information from social media sources, users also see social media as a service channel that enables them to remain in easy touch with organisations (Leggat, 2010).

Whereas social media has all the hallmarks of the traditional paths of communication between company and consumer, it has also evolved as a new communication channel between consumer and consumer and it can thus be considered as a hybrid addition to the promotional mix (Mangold & Faulds, 2009). Mangold and Faulds (2009) therefore stress the permanent incorporation of social media in every company’s Integral Marketing Communication’s strategy. However, only implementing social media in the promotional mix does not guarantee success, as it is also crucial that public relations practitioners adapt their strategies to newly evolving media (Pavlik, 2007). Kietzmann *et al.* (2011) furthermore suggest that a firm’s performance on social media (if done passionately and appropriately) can significantly impact upon reputations, turnover and even survival but it can cause damage if done half-heartedly (Kietzmann *et al.*, 2011).

## **MANAGERIAL IMPLICATIONS AND RECOMMENDATIONS**

The current paper proposes a number of managerial implications. Before beginning with a social media presence, luxury beauty brands need to first reflect upon their core values and their vision and mission. They must develop a clear and succinct social media strategy based on these factors. This strategy needs to include not only obvious objectives such as sales, cost efficiencies and product development, but also needs to consider objectives such as brand awareness, customer engagement and word-of-mouth. It is important that all the objectives are assessable. In the future, retailing will increasingly follow an Omni-channel approach, focusing on a seamless provision of experiences through whichever channel, digital or offline, the brand participates in. In order to make this work, the social media strategy needs to be integrated within the corporate strategy. Every department and every employee has to be aligned with it in order to convey authentic experiences through every single touch point.

For a social media strategy to be successful, a continuous budget needs to be ensured. It is therefore crucial to equip every objective of the social media strategy with measurable key performance indicators. Every campaign on social media is different and in order to continuously improve their activities, luxury beauty brands need to measure the effect of each campaign on customer retention by looking at conversion rates, positive sentiment analysis and successful customer complaints rates amongst others. Picking up the Omni-channel trend cited above, luxury beauty brands would greatly benefit from integrating online and offline data about customers. Customers nowadays expect companies to know when they have previously purchased from them and combining these two databases does not only open up an entirely new dimension to customer experiences but also enables a more complete measurement of customer retention, which ultimately allows for a more personalised communication with customers.

Without investing in traditional media a luxury beauty brand cannot expect any form of engagement from its customers. Prior to a participating in social media, customers have to be made aware of the brand's existence. Therefore luxury beauty brands need to continue investing in advertising, whilst at the same time balancing this with content creation. Whereas under-investment in advertising and over-creation of content lead to a brand's unknown exposure in the market place, vice versa, over-investment in advertising and under-creation of content can provoke a customer expectation gap, ultimately leading to customer disappointment and rejection of the brand. Luxury beauty brands have to find the right balance between advertising and content creation to achieve maximum brand exposure.

Customers aspire to luxury beauty brands. The products are highly coveted for their exclusivity and this is influenced by the brand's story and price point. Therefore, luxury beauty brands should not engage their customers via promotions, as this removes part of the exclusivity from the brand and can even lead to customer disappointment, realising that the brand is not as luxurious as expected when the same promotion tools as in the mass market are applied. The luxury beauty customer is not a value-for-money customer and their involvement starts with the brand's roots, the story. Therefore, luxury beauty brands should engage customers via value-adding content, such as previews, 'How to'- videos, beauty expert interviews - giving customers exclusive content they cannot get anywhere else, delighting them by going the unexpected extra mile. Beauty is fun and so is social media, now the brands need to leverage this by being innovative and having the courage to try things out. Luxury beauty brands should not be afraid to fail; mistakes contribute to the learning curve and prevent becoming rooted in a comfort zone.

Luxury beauty brands participating on social media should be aware that growth is incredibly fast-paced. Some already consider the Facebook social network, founded in 2004, as out-dated. An array of new, visual-based social media tools is on the rise. Whereas text-based social media are convenient for customer service purposes, and therefore have to remain a part of the strategy, visual social media allow for a more vivid and luxurious presentation of the brand. A healthy mix of text and visual-based social media is necessary. Text-based social media communications should have the aim of leveraging customer dialogue via reviews and posts, whereas communication through visual social media should increase emotional engagement by encouraging customers to share photos of important and meaningful moments. To further humanise the image of luxury beauty brands it is important to relax the communication and to not always share perfectly retouched pictures but to allow for natural and more imperfect looks. The aim of every luxury beauty company should be to become truly customer-centered. The participative nature of social media implies that word-of-mouth, and especially negative word-of-mouth, can spread very fast. Therefore luxury beauty companies need to have sufficient resources at hand to follow what their customers say about the brand in each channel and to immediately react to issues in an authentic and transparent manner. Only when the company proves to be reactive and honest will customers feel valued and able to establish a feeling of trust towards the brand. A customer that trusts a brand will ultimately come back.

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# **THE THEORY AND REALITY OF BUDGET MANAGEMENT: A STUDY OF PRIVATE SECTOR MANAGERS**

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## **ABSTRACT**

*This paper is concerned with identifying and exploring the perceptions of budget holders drawn from a range of private sector organisations in the contexts of a) key elements of effective budget preparation and management, and b) negative and positive impacts upon budget preparation and management. Elements considered, in theory, relevant to effective budget setting and management are identified through a literature review. Thereafter, these elements are explored with budget holders (n = 40) from four companies. The companies are located in the field of power systems industry, IT applications, rail industry, and the financial services sector. Those explorations analyse the perceived realities of those budget holders relating to their experiences in the preparation and management of budgets. The findings of the literature review are used as the basis of semi-structured interviews within focus groups. Content analysis utilising rank scores is used to analyse data collected. The outputs from the analysis suggest indicative associations between i) generic lack of budget training, ii) poor understanding of the nature of costs and associated cost behaviour, iii) inability to comprehend the layout and content of budget feedback/information templates, and iv) limited recognition of the connections between budgeting at the departmental level and strategic planning. Conclusions are drawn for a) financial training as part of management development, and b) subsequent investigations into possible typologies.*

**Keywords:** Management accounting practice, Budget management, Accounting education.

## **INTRODUCTION**

This study seeks to identify and understand the phenomena perceived by a range of private sector budget holders impacting their ability to effectively plan for and subsequently manage budgets, and make related financial decisions. Within this paper, the term budgeting process is applied as an umbrella term to subsume budget setting, budget management, and related decision making. It draws upon consultations with focus groups exploring inter-relationships between a) the theoretical purposes and advantages of the budgeting process identified by a literature review, b) the perceptions of budget holders concerning the reality of their positive/negative experiences of the budgeting process, and c) perceptions of those budget holders links between theoretical underpinnings and positive/negative experiences. Subsequent considerations of the outputs of data analysis lead to conclusions UK private sector companies may wish to take account of developing schemes to equip budget holders with the knowledge, understanding and skills to facilitate good management of the budgeting process.

The primary data in this study is collected from forty managers employed by four private sector companies. The companies are located, respectively, in the power systems industry, IT applications, rail industry, and the financial services sectors. Four focus groups, each of ten members, specific to each company are accessed using semi-structured interviews derived from a literature review of the theory of the budgeting process. Each manager is a budget holder with experience of at least three years within their employing company, with work/employment experience ranging from four to twenty one years. The values of the budget managed range from £50,000 to £800,000 standing in their own institution, with the spread of budget-size on a spectrum of circa £20,000 to £500,000.



The conduct of this study complies with the BERA Code of Conduct. Permission has been gained from all individual parties but individual companies are not disclosed for reasons of confidentiality. A deductive approach is adopted, enabling ideas and theories to be established and subsequently tested and explored. According this study builds upon themes reflected within a series of research questions employed as a departure point. The appropriateness and relevance of those questions is confirmed/amended by the literature review. The initial research questions are detailed below in Table 1 and are reviewed at the end of the literature review.

**Table 1: Research questions**

1.	What elements within the budgeting process management experience are perceived by participants as being key components within the experience, and requiring successful engagement with?
2.	What factors relating to their own characteristics and circumstances do participants perceive as providing advantage/disadvantage to them as they endeavour to engage with those elements identified as being key components within the budgeting process experience?
3.	What lessons emerge regarding the improvement of the management of the budgeting process experience through exposure to appropriate financial skills development?

## LITERATURE REVIEW

Theoretical underpinnings informing the semi-structured interviews are drawn from relevant literature covering a spectrum of established management accounting texts in which aspects of and issues associated with effective management of the budgeting process are identified. By implication, issues relating to the ineffective management of the process are identified. In establishing a foundation as a departure point, texts by Atrill and McLaney (2012), Horngre et al (2005), Drury (2009), and Proctor (2012) identify a number of purposes and advantages associated with an effective budgetary management process. Each of these texts reveal striking commonalities. The identified purposes and advantages are themselves derived from a range of literature referred to in the texts by the authors. These are shown in Table 2, summarising Atrill and McLaney (2012: 196-197).

**Table 2: The purposes and advantages of budgets (annotated from Atrill and McLaney, 2012)**

1.	Budgets promote forward thinking and the identification of short-term problems. In so doing, managers must plan and the budgeting process tends to force them to do so. Accordingly, they are likely to identify potential problems. Consequently, if potential problems can be identified early enough, potential solutions may be sought.
2.	Budgets help to co-ordinate various sections of a business, leading to integration and cohesion. It is vital for the plans of one section of the business fit in with those of other sections; a lack of co-ordination could have negative consequences of significance. Having formal statements of plans for each area of the business enables a check to be made that plans are complementary, leading to goal congruence. (Goal congruence is the term used by accountants to denote the matching of individual departmental targets in the context of achieving organisational goals.)
3.	Budgets can motivate managers to better performance. It is believed that people are motivated by having a target to aim for. Provided that the inherent goals are achievable, budgets can provide an effective motivational device.
4.	Budgets provide a basis for a system of control. This enables the comparison of actual performance with budgeted performance, facilitating a tool for control.
5.	Budgets provide a system of authorisation. A 'good' system ensures that funds and resources are targeted appropriately.

The content of Table 2 reflects a more detailed discussion of the relevance of budgeting within a range of literature. Illustratively, Pilkington and Crowther (2007) identify a range of contextual factors, capturing tensions that exist between operational budget managers and institutional imperatives for new approaches to resource allocation, including those within the arena of *beyond budgeting*. The term *beyond budgeting* is the

term applied to the idea of annual budgets being discarded and replaced by re-adjustments of budgets using rolling forecasts, often on a quarterly basis, rather than utilising annual fixed budgets.

Ahmad, Sulaiman and Alwi (2003, p723) suggest that operational managers are interested in the logistics of budgeting practices, and prefer to be given strong guidelines. Those logistics are divided into groups of concerns of managers relating to i) budget setting, ii) budget participation, and iii) the use of budgets in performance measurement. They assert that operational managers do not always find resonance with the views and senior management, leading to tensions. These groupings of logistical concerns concur with the findings of Keen and Murphy (1996 p.40), where the concerns of budget managers focus on the need for i) participation by budget holders in the budget setting process, ii) an appropriate performance measurement system derived from the provision of timely and accurate budget/actual information, iii) suitable advice, support and training for budget managers, and iv) alignment of financial and management accountabilities. Hope and Fraser (2003) identified the advantages of new approaches to budgeting, within the notion of *beyond budgeting*, suggesting that traditional budgeting is time consuming, over-centralized, and outdated, and can lead to dysfunctional and unethical managerial behaviour. Their research focused on large international companies, providing a relevant context for this study. Concurrently, Libby and Lindsay (2003) came to similar conclusions.

A range of literature identifies the attributes which may contribute to effectiveness within the management of the budgeting process. Regarding attributes required by managers to manage budgets effectively, Yuen (2004) suggests that managers should be honest and trustworthy by not succumbing to the temptation to create budgetary slack, a practice which distorts performance, and promotes *game playing*, leading to wasted resources. This echoes Steele and Albright (2004) who explore the propensity of managers to play budgetary games. Jordan and Hackbart (2005) suggest that poor management of the budgeting process can be linked directly to the poor attributes of some managers. Returning to the idea *beyond budgeting*, Libby and Lindsay (2007) debate the need to promote better budgeting rather than 'beyond budgets' and identify the role of managers as being key here, and their training and development needs. In a follow up article (2010) Libby and Lindsay suggest that for better budgeting training of managers is key.

Returning to the inductive approach suggested earlier, this literature review indicates that the research questions in Table 1 do not require amendment.

## METHODOLOGY

A semi-structured interview method is employed within this study. It seeks to elicit views from participants regarding pre-determined themes identified within the literature review. Records of interviews are compiled at the time of the interviews; summaries are agreed with participants for accuracy. Subsequently, content analysis is used to analyse interview records. Accordingly, the methodology comprises both quantitative and qualitative elements.

The broad themes identified via the literature review inform the formulation of a framework of themes within an interview schedule. Data collected through interviews demands appropriate analysis and the extraction of meaning. Bryman and Bell (2011) suggest this presents challenges as unlike the analysis of quantitative data, there are few well established rules for the analysis of qualitative data. Hussey and Hussey (1997), building upon Miles and Huberman (1994), assert that the process of capturing meaning is inextricably connected with content analysis. Although in this study the interview schedule comprises a range of pre-determined themes derived from the literature review, responses to the themed questions may contain additional themes. Robson (2011) suggests that some form of content analysis is appropriate in such circumstances.

## DATA COLLECTION, ANALYSES, AND FINDINGS

Data collected was explored through a content analysis based on a primarily quantitative thrust. This provides sets of descriptives, acting as a base for subsequent analysis in a future study, (possibly using repertory grid analysis as a base for explanatory analyses). This could lead to the establishment of typologies for subsequent

discussion (Saunders et al, 2012). The interview schedule constructed, as detailed in Table 3, is formulated as a series of statements. Interviewees are asked to rank (1 = strongly disagree, 7 = strongly agree) a) the theoretical significance of each statement in the context of good budget practice, b) degree to which they agree with the ‘reality’ of each statement made. The theoretical aspect is denoted *A* in Table 3, and the ‘reality’ of theory existing denoted *B*. Thereafter, the distance between perceptions of the agreement with the theoretical significance and the reality is measured through a spread calculation, annotated *C*. Through the final interview question (question 6), participants were asked to rank their own confidence in their budgeting process management skills. Table 4 details the statements, summarises the mean rankings, and shows the spread.

The rankings reveal positive and negative scores benchmarked against the mid-point between rankings of 1 through to 7 revealing relative associations. Where a positive score – above 3.5/7, is shown, in each case managers are more positive in agreeing with i) the theory (column *A*), and ii) with their experience of theory being a reality (in column *C*). Below 3.5/7, the perception is negative, revealing less agreement. What is also of significance is the spread in column *C* between the two sets of perceptions as set out columns *A* and *B*. In Table 4, statements 1 and 5 reveal positive perceptions. For statements 2, and 4, the theoretical significance (*A*) is above 3.75 and agreed with, but the perceived reality of the theory (*B*) veers in the opposite direction. For statement 3 managers do not buy into the theory underpinning that statement and are of the opinion that reality of their experience of that theory is somewhat negative anyway. Overall the analysis suggests that: i) for statements 1, 2, 4 and 5, participants agree with the theory; ii) for statements 1 and 5 reality tends to have seem reality with theory; for statements 2 and 4 reality does not match theory; and for statement 3, they do not agree with the theory or reality. Overall the participants have express a negative experience of the budgeting process, an indication which should be of concern to employers.

**Table 3: Results of ranking by managers regarding statements derived from the literature, ranked in columns A and B out of 7.**

	Statement	A Mean score	B Mean score	C Spread
1.	Budgets promote forward thinking and the identification of short-term problems. In so doing, managers must plan and the budgeting process tends to force them to do so. Accordingly, they are likely to identify potential problems. Consequently, if potential problems can be identified early enough, potential solutions may be sought.	6.4	3.8	2.4
2.	Budgets help to co-ordinate various sections of a business, leading to integration and cohesion. It is vital for the plans of one section of the business fit in with those of other sections; a lack of co-ordination could have negative consequences of significance. Having formal statements of plans for each area of the business enables a check to be made that plans are complementary, leading to goal congruence.	6.1	2.1	4
3.	Budgets can motivate managers to better performance. It is believed that people are motivated by having a target to aim for. Provided that the inherent goals are achievable, budgets can provide an effective motivational device.	2.5	1.6	0.9
4.	Budgets provide a basis for a system of control. This enables the comparison of actual performance with budgeted performance, facilitating a tool for control.	6.6	3.4	3.2
5.	Budgets provide a system of authorisation. A ‘good’ system ensures that funds and resources are targeted appropriately.	5.8	3.8	2.0
6.	I have confidence in my budget management skills.	n/a	1.3	n/a

The output of the analysis confirms the thrust of discussions in each of the focus groups. Broad consensus is found with the theoretical significance of all statements apart from number 3 (motivation). Probing views expressed regarding motivation revealed a view of budgets being not so much a tool for motivation but, rather more of a restraining/constraining tool. Literature emphasises the behavioural roles, both positive and negative, played by budgeting, and the consequences of the negative aspects. Deeper discussions reveal negative perceptions are linked to lack of knowledge, understanding and skills, and thus training. The summarised views of participants' views of the drivers of negative experiences are summarised in Table 4. Statement 6 from Table 3 is not included as that perception is the consequence of influences reflected within statements 1-5.

**Table 4: Perceptions of causes of low rankings relating to the reality of budgeting process management experiences**

<b>Participants' perceptions as to causes of low ranked experiences</b>
<ul style="list-style-type: none"> <li>▪ Budgets are too often 'handed down from on high' despite units being encouraged to formulate plans.</li> <li>▪ Ever increasing change makes forward planning very difficult.</li> <li>▪ Organisational communication is often poor.</li> <li>▪ Feedback on actual versus budget is difficult to interpret.</li> </ul>
<ul style="list-style-type: none"> <li>▪ The theory is logical but too many departments are prepared to give up resources even if the organisation would benefit as a whole.</li> <li>▪ As the financial year progresses, departments start to become entrenched and see themselves in competition with other departments for resources.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Motivation is hindered not promoted.</li> <li>▪ Budgets stop managers from doing things rather than being enabling.</li> </ul>
<ul style="list-style-type: none"> <li>▪ The theory has some logic.</li> <li>▪ The reality is seen as being impacted negatively by inaccurate feedback and feedback templates which are difficult to understand.</li> <li>▪ Lack of training in understanding feedback templates is endemic.</li> <li>▪ Lack of training in financial skills, including terms, is of great concern.</li> </ul>
<ul style="list-style-type: none"> <li>▪ There is agreement with the rationale of the theory.</li> <li>▪ The reality of budget management sees managers bidding for more resources than they need and then spending spare money at the end of the year to ensure they can bid for it again next year.</li> <li>▪ Internal rivalry between departments for resources.</li> </ul>

The overall ranking of 1.3 out of 7 in Table 3 for the overall budgeting process experience is worrying. Participants' perceptions revealed an impression of demotivation and, as one budget holder put it *banging your head against a brick wall*. An even more worrying point is that of the forty participants, only five (12.5%) had received formal training relating to the budgeting process.

## CONCLUSIONS AND FUTURE DIRECTIONS

This study reveals a dis-joint between the theory of effective budgeting and the reality of the experiences of the participants. This has managerial implications for organisations in that the lack of training and development in budget preparation and management has consequences. These consequences are of significance and include: i) the non-achievement of the overall vision and mission through non-attainment of strategic objectives; ii) poor co-ordination and integration of departmental and unit budgets, leading to lack of both focus and cohesion; iii) a propensity to play games, creating budgetary slack, and then spending up the (artificial) budget limit shortly before the end of the financial year end. These consequences are not surprising given the findings of established prior literature. Illustratively, Merchant (1981) found strong links between effective budgeting and managerial behaviour resulting from a strong budgeting culture promoted across organisations by senior management teams. That research built upon Kenis (1979) who concluded that budgetary participation and budget goal clarity, accompanied by good communication, facilitated better budgetary performance, cost efficiency, and job performance. Both studies involved interviews with large numbers of managers (112 and 169 respectively), with the research base thus being broader than in this study both in volume and range of organisations considered.

There is scope for this study to survey a greater number of managers, and to extend the scope of types of organisations. That said, the two established studies cited here use content analysis, as does this study. With a larger cohort of managers, more insightful perceptions may be obtained through using repertory grid analysis, linking elements of the budgetary process identified by participants as being key in contributing to a successful experience, with their perceptions of how their training or lack of training impacts upon their experience in the context of each element. Additionally, it would be appropriate to extend the study to include international organisations to explore the impact of national cultures upon the degree of impact of culture upon budgetary performance. Little research appears to have been promoted in this area. In each study the characteristics and attributes required by managers to facilitate a more positive budgeting process experience would be identified. This latter point should be linked to a broader and deeper literature review. Budget holders would then articulate their views regarding which characteristics and attributes they consider significant. The possession or lack of these may be established and inter-relationships subsequently analysed. The findings might then inform organisations about the climate they need to create to foster a more appropriate environment for the budgeting process.

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# TECHNOLOGY MANAGEMENT AND THE LINK WITH TECHNOLOGY STRATEGY AND COMPANY PERFORMANCE

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## ABSTRACT

*The role of the top manager in technology intensive industries has become much more multidimensional and multi-disciplinary. A critical concern of this discipline is optimising returns to the company's stakeholders over the long term. This means sustaining performance by balancing strategic investments in technology with short-term profitability. The purpose of this study was to investigate technology management principles in widespread use in technology intensive industries and to explore their relationship to company performance. A non-probability, judgment sample of companies listed on the Johannesburg Stock Exchange (JSE) were taken. The study makes a contribution to the field of strategic management research by integrating the dimensions of several previous studies, to derive a more comprehensive taxonomy of technology management archetypes. Two distinct technology management factors obtained with the analysis were proved to positively influence the company performance dimensions and were classified as R&D Commitment and Control Market Planning factors. The results show that strategic management choices can significantly affect company performance. It thereby indicates which of the underlying dimensions have the strongest relationship with company performance.*

**Keywords:** Technology Management; Company Performance; Control Market Planning; Process Management; R&D Commitment.

## INTRODUCTION

Pelser (2001) argues that technology plays an essential role in interactions among the individual, society and nature. Technological advances have major effects on each of these entities and are, in turn, influenced by them. Management of technology involves developing an understanding of these relationships and dealing with them in a rational and effective manner. The widely acknowledged importance of technology will grow; increasing the emphasis top managers must place on their companies' ability to compete through technology.

The 2011-12 R&D survey, conducted by the Human Sciences Research Council (HSRC, 2014), shows that South Africa's performance remains far below the government's initial target of spending 1% of GDP on R&D by 2008. South Africa had spent R22.2bn on R&D in 2011-12, or 0.76% of GDP. This was precisely the same ratio reported for 2010-11, and is noticeably down on previous surveys: it was 0.87% in 2009-10, 0.92% in 2008-09 and 0.93% in 2007-08. These findings emulate the global trends of slowing growth in R&D investment in many parts of the world as a result of the recent global financial crisis. Unfortunately for South Africa, it also trails far behind the international average of 1.77%, and lags most of the other members of BRICS (an association of five major emerging national economies: Brazil, Russia, India, China and South Africa).

The progressiveness of technology management, however, goes beyond basic research and development (R&D) expenditures. Increasingly, corporate strategists are focusing on the integration of technology throughout the organisation as a source of sustainable competitive advantage. This particular study builds on the previous works of Pelser (2014a, 2014b, 2014c, 2014d) regarding strategy taxonomies and their link to company performance.

# LITERATURE REVIEW

According to Thongpapanl (2012), the management of technology links engineering, science, marketing, operations, human resources and other management disciplines to formulate strategy, develop technological capabilities and apply them to achieve strategic objectives. This study follows the usage of Clark, Ford & Saren (1989), who use the term to refer to the organisational issues and the processes involved in developing and implementing a strategic approach to technology. Technology management thus relates to the process aspects of technology. The strategic approach has evolved from the control paradigm, which argues for an integration of technology with corporate strategy (Pelser, 2001). Technology has been seen as an essential component of the strategy and forms part of the strategic thinking and planning process (Pelser, 2014a). Companies will concentrate on constantly refining their abilities to acquire and deploy relevant technologies, which will be treated as an integral part of their corporate strategies. The technology leaders will be faced with technology acquisitions and deployments. Hence, sustainable competitive advantage will be realised only from the company's ability to become skilled at the technology acquisition and deployment tactics (Pelser, 2014a, 2014b, 2014c, 2014d).

## Technology performance measurement

Hansen (2010, p. 17) remarks, that in many manufacturing companies' managers do not have adequate measures for evaluating company performance or for comparing overall performance from one subsidiary to the next. The author goes further by stating that the traditional cost-accounting figures can be used, but that these figures do not represent the true nature of company performance. What Hansen (2010) found is that private sector accounting systems, as traditional management information systems, which are supposed to represent the organisational reality, are problematic themselves. Zahra & Hayton (2008) established that the literature on performance is very extensive, but that it shows a lack of consensus as to the meaning of the term. The use of the term "performance" by researchers, includes many constructs measuring alternative aspects of performance. This is consistent with the finding of Murphy *et al.*, (1996) who were able to isolate a total of 71 different measures of performance.

## Technology management dimensions

This study follows the usage of Clark *et al.*, (1989, p. 215), who used the term *management of technology* (MOT) to refer to the organisational issues and the processes involved in developing and implementing a strategic approach to technology. Technology management is measured through the use of the following six process or technology management dimensions (Pelser, 2001):

1. *Technology awareness* refers to a company's scanning processes, specifically the emphasis it places on acquiring information about emerging technological threats, opportunities and sources (Clark *et al.*, 1989; Dvir *et al.*, 1993). It is measured in terms of the emphasis placed on staying informed about emerging technologies or competing technologies and the awareness of different technology sources.
2. *Technology acquisition* refers to the methods by which companies acquire technology internally or externally (Maidique & Patch, 1988; Clark *et al.*, 1989). It is measured in terms of the emphasis a company places on acquiring technology from internal R&D activities and from external research institutes or other companies.
3. *Technology and product planning* refers to the formal planning processes that companies utilise to select and manage R&D programs (Maidique & Patch, 1988). According to Lee, Yoon, Lee, & Park (2009) technology planning involves the reformulation of technical terms and objectives into business terms and objectives. It is measured in terms of the emphasis a company places on formal product plans that are market-driven and formal technology plans that are product-driven.
4. *R&D organisation and management* refers to the degree to which R&D activities are linked to other business operations and the methods companies employ to organise, empower and encourage R&D personnel (Eng & Ozdemir, 2014; Maidique & Patch, 1988). It is measured in terms of the emphasis a



company places on integrating R&D operations into product division operations and managing R&D personnel based on R&D project success.

5. *R&D investment* refers to the methods by which companies fund R&D activities (Tsai, Hsieh, & Hultink, 2011) and the emphasis placed on achieving a specified return on investment (Clark *et al.*, 1989). It is measured in terms of the level of investment the company commits to R&D activities relative to sales and the emphasis placed on achieving financial leverage for R&D investments through external funding.
6. *Manufacturing and process technology* refer to the degree to which new technology is incorporated into the company's manufacturing plants and processes (Zahra & Covin, 1993). The appropriate manufacturing technologies can provide the company with considerable operational and competitive benefits (Sohal, 1995). It is measured in terms of the emphasis a company places on the use of technology to achieve low manufacturing costs or to manufacture unique products and to improve production flexibility or reduce lead-times.

## Company performance

Zahra & Hayton (2008) recognized that the literature on performance is very wide, but that it shows a lack of agreement as to the meaning of the term. This is consistent with the findings of Murphy, Trailer and Hill (1996) who, after a comprehensive literature review, were able to isolate a total of 71 diverse measures of performance. Despite the fact that financial performance is obviously important for the company, it draws only on the economic dimension of performance, neglecting other important goals of the company (Venkatramen & Ramanjan, 1986). This argument is supported by Zahra & Covin (1994), who argues that research that considers only a single performance dimension or a narrow range of performance constructs (e.g. multiple indicators of profitability), may result in misleading descriptive and normative theory building. According to the author of this study, it is unlikely that any single performance measure or dimension could serve the needs of a diverse set of research questions. This view is also shared by Zahra & Hayton (2008), who points out, that a multi-dimensional construct provides an alternative in establishing valid operational definitions. Further to this, Murphy *et al.* (1996) argue, that a distinction between performance measures should be done on the grounds of whether the sources are secondary data (also known as archival) versus primary data (e.g. questionnaire interview).

## PROBLEM STATEMENT AND RESEARCH QUESTIONS

There is a critical need to understand the key factors that lead to innovation excellence, the organisational and environmental innovation, and the importance of innovation strategies (Pelser, 2014a, 2014b, 2014c, 2014d). The main purpose of this study is to investigate technology management principles in widespread use in technology intensive industries and to explore their relationship to company performance. The problem addressed in the study, is the need for a better understanding of the role that technology management play in determining company performance. The study focuses on two central questions:

1. What is the prevalent technology management dimensions being employed by South African companies in technology intensive industries?
2. What relationships can be observed between the technology management dimensions and company performance?

This design utilised a cross-sectional approach making use of a survey method that used a self-administered questionnaire for data collection. According to Sekeran (2003), a descriptive study determines and describes the characteristics of the variables of importance in a context. Further, in this study, a triangulation methodology was adapted in the study of ICT adoption, diffusion, and infusion. Approach triangulation was used where both quantitative and qualitative techniques were employed. Using a qualitative approach, a review of existing literature on the subject matter – adoption, diffusion, infusion, and technology acceptance determinants

and assessment mode – was done. In addition, a discussion of the instrument constructs was done with a panel of experts to improve its validity and reliability (Mangan *et al.*, 2004).

## RESEARCH METHODOLOGY

The data gathering and analysis phase of the study adheres to the same methodology as applied by Pelser (2014a, 2014b, 2014c, 2014d) regarding strategy taxonomies and their link to company performance and had the following three objectives:

1. Gathering data along key technology management dimensions from R&D managers of technology intensive companies.
2. Gathering objective data about the performance (input and output) of those companies selected for the study.

The number of dimensions historically used to develop strategy taxonomies and the variables required to describe them, have varied by researcher (Pelser, 2001). When Miller & Friesen (1977) derived their strategy taxonomies in 1977, they gathered data on 31 variables representing four categories of adaptive behaviour (later classified as strategy dimensions). Galbraith & Schendel (1983) gathered data on 26 variables using the PIMS database. Snow & Hrebiniak (1980) used a 145 item questionnaire to gather data that were subsequently reduced to ten distinctive competence variables and one performance ratio prior to analysis. Cool & Schendel (1987) developed 15 scope and resource commitment dimension variables based on data drawn from a large variety of databases. Fiegenbaum & Thomas (1990) used seven scope and resource deployment dimensions and six performance variables that reduced to three performance ratios. Zahra & Covin (1993) used four dimensions to develop five business strategy archetypes and three dimensions to represent technology strategy. Dvir, Segev & Shenhar (1993) used Miles & Snow's (1978) four strategy archetypes and two strategy variables. Several of the seminal studies on strategic taxonomies gathered research data in the form of management perceptions of their company's objectives or capabilities relative to some benchmark, e.g. the competition's objectives or capabilities (Pelser, 2001). This is consistent with the method recommended by Galbraith & Schendel (1983) and Panagiotou (2007), and is the method employed in the present study. This method also lends itself to answers that can be provided on a normalised five point Likert Scale, with "three" valued answers being "neutral" or "at the industry norm".

A survey of R&D managers of companies listed on the Johannesburg Stock Exchange (JSE) was conducted through the use of a questionnaire. The South African context was chosen both from an operational purpose and the objective to compare the findings with those obtained from studies conducted in other countries or regions. Since the performance of companies in technology intensive industries could be more affected by technology policies than by the performance of companies in other industries, it was assumed that companies in technology industries would be more likely to have technology strategies, thereby making it easier to observe the relationships of interest. R&D managers from 200 South African technology intensive companies were asked to complete a self-administered electronic questionnaire designed to gather data regarding their company's technology policies. Eighty-four valid responses were ultimately received and used in the study. A non-probability, judgment sample of companies listed on the Johannesburg Stock Exchange (JSE) was taken. It was decided to use listed companies on the JSE for two primary reasons: (1) Listed companies display a capacity and capability (capital and human resources) for R&D activities compared to smaller unlisted companies. (2) Quantifiable data (e.g. annual reports) is more readily available for the external stakeholders of listed companies than it is on unlisted companies. Two hundred companies or divisions were identified and incorporated in the survey after the screening stage. Feedback was received from 89 R&D managers of these two hundred companies, stating their willingness to participate in the survey. A total of 84 completed responses were received and captured for the study. This translates to a 42% response rate.

## DATA DISCUSSION

Twelve technology management variables (A11, A12 and A21 – A30), were factor-analysed by using the principal axis factoring method. Then using the latent root criterion, three factors were extracted on the basis of

their Eigenvalues being greater than 1. Together they accounted for 78.81% of the variation in the data. The factors were rotated by using the Varimax rotation method. The correlation matrix for the twelve management variables was reviewed to confirm the existence of a substantial number of correlations, which indicates the existence of common factors. The technology management variables had correlations greater than .26 and more than 60% of the matrix elements were greater than .50. Bartlett's test of sphericity confirmed, that the correlation matrix was not an identity matrix.

The Kaiser-Meyer-Olsen (KMO) measure as sampling adequacy was .756, which Hair *et al.*, (1998) characterised as "middling". This is also defined as an adequate measure, indicating that the degree of correlation between the unique factors was low. The Chi-square statistic was 922.647 with 66 degrees of freedom, which is significant at the .000 level. The reduced set of variables collectively meets the necessary threshold of sampling adequacy and thus the fundamental requirements for factor analysis. The reproduced correlation matrix contained 12 residual values (18%) greater than .05, indicating that the model fits the data. The rotated technology management factor loadings are contained in Table 1. As a reminder, each respondent was asked to report on the importance of each of the variables to his or her company relative to major competitors. The heaviest factor loading for each variable is formatted in bold font style.

**Table 1: Rotated technology management factor matrix**

<i>Variable</i>	<i>Variable Description</i>	<i>Factor 1</i>	<i>Factor 2</i>	<i>Factor 3</i>
<b>A22</b>	Awareness of technologies	<b>.954</b>	.165	.054
<b>A21</b>	Awareness of technology sources	<b>.904</b>	.225	-.018
<b>A25</b>	Using formal product plans	<b>.758</b>	.466	.092
<b>A24</b>	External technology acquisition	<b>.729</b>	.319	-.042
<b>A23</b>	Internal technology acquisition	<b>.727</b>	.366	.103
<b>A26</b>	Using formal technology plans	<b>.657</b>	.389	-.101
<b>A27</b>	Integrating R&D operations	.350	<b>.821</b>	.069
<b>A29</b>	High level of R&D investment	.329	<b>.732</b>	.121
<b>A30</b>	External funding for R&D	.160	<b>.674</b>	-.193
<b>A28</b>	Evaluating & rewarding R&D personnel	.370	<b>.662</b>	-.039
<b>A11</b>	Technology and manufacturing	-.004	-.133	<b>.950</b>
<b>A12</b>	Technology and production flexibility	.036	.075	<b>.856</b>

All of the primary factor loadings used in the factor interpretation exceeded .50 in value. According to Hair *et al.* (2010), factor loadings greater than  $\pm .30$  are considered to meet the minimal level; loadings of  $\pm .40$  are considered important; and if the loadings are  $\pm .50$  or greater, they are considered more important.

1. R&D Commitment – The Eigenvalue of the first factor was 5.729. The technology awareness variables (A21-A22), technology acquisition variables (A23-A24) and the technology and product planning variables (A25-A26) loaded heavily on this factor. Taken together, these patterns of factor loadings clearly reflect the aggressiveness of a company's R&D commitment.
2. Control Market Planning – The Eigenvalue of the second factor was 2.889. The R&D organisation and management variables (A27-A28) and R&D investment variables (A29-A30) loaded heavily on this factor, indicating the degree of researcher empowerment, researcher rewards and integration of R&D with the business units.
3. Process Management – The Eigenvalue of the third factor was 1.806. The manufacturing and process technology variables (A11-A12) both loaded heavily on this factor. This indicates that the underlying

The methodology for factor analysing the dependent variables, was similar to that used for the previous sections. Six company performance variables (B31 – B36) were factor-analysed by using the principal axis factoring method. Then, using the latent root criterion, two factors were extracted on the basis of their Eigenvalues being greater than 1. Together they accounted for 75.80% of the variation in the data. The factors

were rotated by using Varimax rotation method. Based on the Kaiser criterion of selecting factors with Eigenvalues greater than 1, the number of factors to be extracted, were set at two. However, the scree test indicates, that three factors would be retained. In combining these two criteria, two factors were eventually retained for further analysis, because of the very low Eigenvalue (.538) for the third factor. The Chi-square statistic was 235.832 with 15 degrees of freedom, which is significant at the .000 level. The reduced set of variables collectively meets the necessary threshold of sampling adequacy and thus the fundamental requirements for factor analysis. The final statistics showed, that 75.80% of the variance was explained by the two factors. The reproduced correlation matrix contained 3 residual values (20%) greater than .05, indicating that the model fits the data. The rotated company performance factor loadings are contained in Table 2. The heaviest factor loading for each variable is formatted in bold font style.

**Table 2: Rotated company performance factor matrix**

<i>Variable</i>	<i>Variable Description</i>	<i>Factor 1</i>	<i>Factor 2</i>
<b>B32</b>	Efficiency of innovation project management	<b>.841</b>	.308
<b>B33</b>	Impact of the innovations	<b>.797</b>	.213
<b>B31</b>	New product contribution to sales	<b>.773</b>	.188
<b>B34</b>	R&D expenditure	<b>.756</b>	.123
<b>B35</b>	Patents registered	.089	<b>.762</b>
<b>B36</b>	Return on assets	.308	<b>.619</b>

All of the primary factor loadings used in the factor interpretation, exceeded .50 in value. Considering the factor loadings, the rotated factors are interpreted below:

1. Input Performance – The conceptual definition for this factor is the extent to which the R&D manager or other top manager perceives the innovation management organisation has achieved its desired objectives over the last three years. The Eigenvalue of the first factor was 3.167. The four input variables (B31 – B34) loaded heavily on this factor. Taken together, this pattern of factor loadings clearly reflects the effectiveness of the innovation management organisation (IMO).
2. Output Performance – This factor represents the performance of the company where (1) patent information was used to measure R&D activities and (2) return on assets (ROA) was used to measure company financial performance. The Eigenvalue of the second factor was 1.381. The patent's registered variable (B35) and the return on assets variable (B36) loaded heavily on this factor, indicating the degree of fit for this performance measure.

The Cronbach alpha computations for the five extracted factors are shown in Table 3. For the R&D commitment it is .9367; for the control market planning it is .8601; for the process management it is .8826, and for the input performance it is .8887.

**Table 3: Reliability analysis**

<i>Variable</i>	<i>Scale mean if item deleted</i>	<i>Scale variance if item deleted</i>	<i>Corrected item total correlation</i>	<i>Alpha if item deleted</i>	<i>Alpha</i>
<b>R&amp;D Commitment (R&amp;D)</b>					
A21	17.6667	29.9598	.8716	.9177	<b>.9367</b>
A22	17.5595	30.1289	.8882	.9161	
A23	18.2500	30.4307	.7744	.9298	
A24	18.3095	29.3247	.7845	.9296	
A25	17.7857	31.3993	.8470	.9221	
A26	17.9286	30.5972	.7368	.9349	
<b>Control Market Planning (CMP)</b>					
A27	9.9048	10.0390	.7991	.7864	<b>.8601</b>

A28	10.2262	9.6952	.6981	.8264	
A29	10.1310	9.4646	.7346	.8102	
A30	10.3810	11.2266	.6083	.8593	
Process Management (PM)					
A11	3.0476	1.2266	.8108	-	.8826
A12	3.2857	1.9415	.8108	-	
Input Performance (InP)					
B31	6.9405	13.3820	.7446	.8617	.8887
B32	7.1429	13.0637	.8234	.8305	
B33	7.6548	13.1685	.7540	.8584	
B34	7.8333	15.1044	.7130	.8741	
Output Performance (OutP)					
B35	21.2381	151.9185	.5015	-	.4104
B36	2.4524	11.6724	.5015	-	

The factor analysis found relatively high degrees of communality among the variables. Most of the dimension variables have communalities greater than 0.5. The clear patterns of the factor loadings on the variables further validated the content and process constructs. To ascertain the relative importance of the factors in explaining the variation in the dependent variables, multiple regression analysis was used to analyse the relationship between the dependent variables and independent variables. The Pearson r-correlations were calculated to find the strength and direction of the relationships between the factors and the performance dimensions. By using p-values, it was possible to distinguish between the levels of significance. From Table 4 the null-hypothesis was rejected ( $p < 0.05$  or  $p < 0.01$ ) for all the factor correlations except for the Process Management factor ( $p > 0.05$  or  $p > 0.01$ ). It is apparent that both the R&D Commitment and Control Market Planning factors have a significant positive effect on Input and Output Performance.

**Table 4: Correlation matrix**

		<b>R&amp;D Commitment</b>	<b>Control Market Planning</b>	<b>Process Management</b>	<b>Input Performance</b>	<b>Output Performance</b>
<b>R&amp;D Commitment</b>	Pearson Correlation	1.000	.638*	.012	.579*	.710*
	Sig. (2-tailed)	.	.000	.917	.000	.000
	N	84	84	84	84	84
<b>Control Market Planning</b>	Pearson Correlation	.638*	1.000	-.039	.731*	.382*
	Sig. (2-tailed)	.000	.	.721	.000	.000
	N	84	84	84	84	84
<b>Process Management</b>	Pearson Correlation	.012	-.039	1.000	-.195	-.030
	Sig. (2-tailed)	.917	.721	.	.075	.788
	N	84	84	84	84	84
<b>Input Performance</b>	Pearson Correlation	.579*	.731*	-.195	1.000	.435*
	Sig. (2-tailed)	.000	.000	.075	.	.000
	N	84	84	84	84	84
<b>Output Performance</b>	Pearson Correlation	.710*	.382*	-.030	.435*	1.000
	Sig. (2-tailed)	.000	.000	.788	.000	.
	N	84	84	84	84	84

\*. Correlation is significant at the 0.01 level (2-tailed).

The level of relationship ( $R^2$  or  $Rsq$ ) that can be detected reliably with the proposed regression analysis was calculated to indicate the percentage of total variation of the Input Performance factor (InP). The Control Market Planning ( $Rsq = 0.5344$ ) factor explains 53% of the total variation of the Input Performance factor. It means that the degree of researcher empowerment, researcher rewards, the integration of R&D with the business units and the level of R&D investment, determine the variation of the company's contribution to sales, efficiency of innovation project management, impact of the innovations, and R&D expenditure. The R&D Commitment factor ( $Rsq = 0.3352$ ) explains 34% of the total variation of the Input Performance factor. It means that the aggressiveness of a company's R&D investment and the emphasis it places on integrating R&D

operations, determine the variation of the company's contribution to sales, efficiency of innovation project management, impact of the innovations and R&D expenditure. The Process Management ( $R_{sq} = 0.0380$ ) factor explains 4% of the total variation of the Input Performance factor. It means, that the emphasis a company places on manufacturing flexibility and technology processes, determines the variation of the company's contribution to sales, efficiency of innovation project management, impact of the innovations, and R&D expenditure.

The level of relationship ( $R^2$  or  $R_{sq}$ ) that can be detected reliably with the proposed regression analysis was calculated for the creation of the Output Performance model. The Control Market Planning ( $R_{sq} = 0.1459$ ) factor explains 15% of the total variation of the Output Performance factor. It means that the degree of researcher empowerment, researcher rewards, the integration of R&D with the business units, and the level of R&D investment, determine the variation of the company's contribution to R&D activities (patents registered) and the company's efficiency in using its assets (return on assets). The R&D Commitment ( $R_{sq} = 0.5041$ ) factor explains 50% of the total variation of the Output Performance factor. It means, that the aggressiveness of a company's R&D investment and the emphasis it places on integrating R&D operations, determine the variation of the company's contribution to R&D activities (patents registered) and the company's efficiency in using its assets (return on assets). The Process Management ( $R_{sq} = 0.0900$ ) factor explains only 0.1% of the total variation of the Output Performance factor. It means, that the emphasis a company places on manufacturing flexibility and technology processes, have relatively no impact on the variation of the company's contribution to R&D activities (patents registered), and the company's efficiency in using its assets (return on assets).

## MANAGERIAL IMPLICATIONS

The role of the top manager in technology intensive industries has become much more multidimensional and multi-disciplinary. This is recognized by assigning both the R&D Commitment and Control Market Planning factors to the top manager and top management team functions. These two functions are responsible for the formal technology policy within the company, with the objective to manage technical risk, increasing the sophistication of technology components utilised and the number of technologies in which the company maintains competence. Furthermore, they should be conscientious with encouraging researcher empowerment, the vast integration of R&D with the company's business units and a high level of R&D investment. Another requirement of the innovation management organisation (IMO) is frequent new product introductions and frequent product upgrades, with the emphasis placed on expanding existing product lines and by introducing improved versions of existing products. The activities associated with this Product Development Intensity factor, are contained within the R&D, production and sales & marketing functions; the latter function being primarily responsible for interfacing between the company and the marketplace for introducing new or upgraded products.

The R&D Commitment factor reflects the aggressiveness of a company's R&D commitment and the emphasis it places on integrating R&D operations. It mirrors the organisational issues and the processes involved in developing and implementing a strategic approach to technology. Companies, who have loaded heavily on this factor, emphasise acquiring information about emerging technological threats, opportunities and sources. Furthermore, these companies express the need for acquiring technology from internal R&D activities and/or external sources. The majority of the respondents have indicated, that the principal form of R&D applied for technology acquisition and assimilation, are their own laboratories. This conforms to similar findings, which suggest a growing centralisation of R&D among leading high-technology companies. Furthermore, these companies place a significant emphasis on formal product plans that are market-driven and formal technology plans that are product-driven.

The Control Market Planning factor indicates the degree of researcher empowerment, researcher rewards, the integration of R&D with the business units and the level of R&D investment. It, therefore, signifies the propensity of a company to integrate R&D operations into product division operations and to manage R&D personnel based on R&D project success (Garnett & Pelser, 2007). The innovation management organisation (IMO) is responsible for developing new products and technologies in response to future threats and opportunities. Hence, science and technology from the external environment are combined with the company's in-house skills, knowledge and competencies to develop new products and technologies. Companies that have

loaded high on this factor are displaying characteristics of a typical IMO. Furthermore, these companies commit high levels of investment to their R&D activities relative to sales and place emphasis on achieving financial leverage for R&D investments through external funding. These investments determine the technical outputs of a company, such as patents and new product and process technologies.

## CONCLUSION

Strategic management is inter alia a process of managing a company's relationship with the environment. As a matter of strategy, a product should be matched with that segment of the market in which it is in all probability most likely to succeed (Prinsloo, Groenewald & Pelser, 2014, p. 130). A critical concern of this discipline is optimising returns to the company's stakeholders over the long term. This means sustaining performance by balancing strategic investments in technology with short-term profitability. The present study makes a significant contribution to the field of strategic management research by integrating the dimensions of several previous studies, to derive a more comprehensive taxonomy of technology management archetypes. It also derives a broader set of dimensions for use in strategic management research. The results show that technology management choices can significantly affect company performance. It thereby indicates which of the underlying dimensions have the strongest relationship with company performance.

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# **DEVELOPMENT OF THE NATIONAL METALS RECYCLING SYSTEM IN RUSSIA: SCENARIO MODELING TO ASSESS THE INDUSTRY'S PROSPECTS**

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## **ABSTRACT**

*The article defined the approaches to the predictive evaluation of innovation processes and the structural transformation in the sector utilization of secondary metallurgical raw materials of the Russian economy. In the formation of the infrastructure of the green economy described the features and targets of the development of collection and processing of scrap and waste metals. The article contained the results of determine of the scenario space to assess the middle-term dynamic of the technological base and economic activities of companies on recycling of metals. Also here are formulated the problems of the development strategy for the national system of the secondary metallurgical resources recycling.*

*Keywords:* scenario modeling, development, metal recycling, green economy.

## **INTRODUCTION**

With the reduction of the efficiency of traditional factors of production are activated innovations in various fields of human activity. In many respects this breakthrough technology from the cluster NBIC, which define the face of a new wave of technological long Kondratyev's cycle. However, in the context of national strategies of re-industrialization of the economy (not canceling, but the changing environment and the thrust of the operation and development of the institutions of the knowledge economy in the information society) do not lose their significance questions modernization of the structure, equipment and technologies for basic industries. Development and introduction of new materials activates the processes of metals substitution, but does not reduce the value of metals in implementation of investment projects and infrastructure programs. The long destructive period in RF industry and science interrupted evolutionary path of development of the industry of collection and processing of scrap and waste metal. Nevertheless, the national strategy of innovative development opens up the possibility to overcome quality gaps. This creates conditions for the formation of advanced technology and institutional infrastructure for the sphere recycling of secondary metallurgical raw materials in the Russian economy. In this regard, the especial importance acquires a research of management processes for transforming the industry by using technologies of the futures design based on the scenario modeling of socio-economic development – from forecasting to projecting.

## **RESEARCH METHODOLOGY**

The most productive from the point of view of the author, can be the generalized description of the modern economic organization in the framework of the system concept of the enterprise on the basis of integration of the rationalistic and processual paradigms of the forecasting research in interpretation of the uncertainties in developing economic systems. The complex characteristics of considered a sector of economy for collection and processing of scrap and waste metal determines its consideration as a multi-level organizational system

Development issues of the prognostic potential of economic science considered by the author in the areas of improving the methodology of future research and development the technologies and tools for solutions of predictive tasks in the systems of organizational control, including - scenario modeling (Pisareva O.M., 2013; Porter A., 2004). The basis of research tools are a methods of the system analysis, mathematical modeling, probability theory, econometrics and fuzzy computing. The source of information were the various scientific publications and the analytical reviews in russian and world press, the official statistical data of: the Federal Agency for Statistics of the Russian Federation (RF) (<http://www.gks.ru>), the Ministry of economic development of the Russian Federation (<http://www.economy.gov>), the Non-commercial partnership “National self-regulatory organization refiners scrap of ferrous and non-ferrous metals, recycling of vehicles” - NP NSRO “RUSLOM.COM” (<http://www.ruslom.com>), the Bureau of International of Recycling ([www.bir.org](http://www.bir.org)), the World Steel Association (<https://www.worldsteel.org>), the Information agency “RUSMET.RU” (<http://www.rusmet.ru>).

## GENERAL DESCRIPTION OF THE SUBJECT AREA

The transition to an innovative and socially oriented model of development is possible only when implementing economic restructuring and technological upgrading their basic industries. One of the internal reserves increase the efficiency of the Russian economy is linked to the intensive development of recycling of secondary raw materials. Its utilization in the economically justified degree can simultaneously achieve the three main objectives of sustainable development paradigm: environmental protection, preservation of natural resources and reducing of the total cost of production of the social product. With the development of new materials the metal production remains a major source to meet the demand for investment goods in the economy while deploying the trends of declining share of metal consumption in the GDP. Because the output of metal products from recycled materials is different by fold reduction (in some case even ordinal) of the material and energy costs, the design and creation of a modern system of utilization of secondary metallurgical resources (SMR) is not only the key factor of a resource saving and environmental protection, but also maintains the competitiveness of domestic products and national economy as a whole. Adherence to the principles of the sustainable development, as well as the requirements of waste prevention is becoming a peremptory norm of the organization of production in modern society. In this regard it should be noted the special role in the economy and economic activity for the collection and processing of SMR.

The place of the industry of collection and recycling of scrap and waste ferrous and nonferrous metals (SMR-Industry) in the Russian economy is characterized by the data given in Table 1. Data on consumption of steel in physical terms and the table “input-output” (is formed the Federal State Statistics Service of RF) allow us to estimate the main trends in the structure of the metal flows in the Russian economy. The individual relative natural and finance indexes that characterize trends in the industry are given in Table 2. Given the structure of investment products for development programs of the economy and society the most significant contribution is achieved through involvement SMR in reproductive processes. But in a period of social and economic transformations the production complex for the collection and processing of scrap metal practically ceased to exist as a coherent economic organism, and this has led, unfortunately, still continues to have a significant impact on the loss of efficiency of the Russian economy.

Since the 1990s the total collection of scrap was reduced from 89-90 to 22-24 million tons. The latter is not entirely due to a decline in industrial production, as this consumption of scrap metal in the smelting, for example, of steel was decreased from 480-484 to 345-350 kg per 1 ton. Historically in the USSR was created one of the most organizationally and technically advanced systems of the scrap metal recycling. With the change of the legal foundations of the economy and the transition from the centralized administration to the diversified market methods the infrastructure of collection and processing recycled materials in RF was almost destroyed. There are now the problems of forming the institutional framework of reconstruction and development of the industry of collecting and processing scrap and metal waste, as well as the development of effective mechanisms for its management in the new economy. If in the planned economy of the USSR all enterprises and organizations of associations “Vtorchermet” (ferrous metals) and “Vtortsvetmet”(non-ferrous metals) functioned as a sub-sector of metallurgical production, in current conditions need their consideration and formalization as an independent business activities, represented in different sectors of the economy.

**Table 1: General characteristics and dynamic indicators of the SMR-Industry**

Index	2009	2010	2011	2012
Steel production, million tons	59,80	66,80	68,10	70,40
Consumption of scrap, million tons	13,95	18,26	17,63	17,04
Production of non-ferrous metals, million tons	5,01	5,41	5,40	6,30
Consumption of non-ferrous scrap, million tons	2,06	2,67	2,84	2,64
Number of employees SMR-Industry, thousand.	294,06	295,20	285,50	280,90
The share of Russian level, %	0,42%	0,42%	0,40%	0,39%
The average monthly wage in SMR-Industry, rubles	20400,0	21000,0	25000,0	27000,0
The share of Russian level, %	109,46%	100,23%	103,76%	101,16%
SMR processing volume, % change year	63,67	134,09	102,84	96,95
ferrous metals	62,05	134,34	102,79	97,35
non-ferrous metals	80,75	131,91	104,56	92,66
Procurements volume of scrap and waste, million tons	18,803	25,163	25,838	25,108
ferrous metals	16,732	22,428	23,016	22,463
non-ferrous metals	2,071	2,735	2,823	2,646
Sales volume of refined products SMR, million tons	16,010	20,933	20,473	19,683
ferrous metals	13,952	18,261	17,632	17,044
non-ferrous metals	2,058	2,672	2,840	2,639
Export of scrap and waste, million tons	2,797	4,275	5,491	5,462
ferrous metals	2,780	4,210	5,470	5,450
non-ferrous metals	0,017	0,065	0,021	0,012
Import of scrap and waste, million tons	0,004	0,052	0,129	0,036
ferrous metals	0,000	0,050	0,090	0,030
non-ferrous metals	0,004	0,002	0,039	0,006

Source: the Federal State Statistics Service of the RF, the Ministry of Industry and Trade of the RF.

**Table 2: The relative performance estimates of the SMR-Industry in the Russian economy**

Index	2009	2010	2011	2012
<i>Average relative performance (kg/rub. GDP)</i>				
Steel production	0,00154	0,00144	0,00122	0,00112
Consumption of ferrous metals scrap	0,00036	0,00039	0,00032	0,00027
Production non-ferrous metals	0,00013	0,00012	0,00010	0,00010
Consumption of non-ferrous metals scrap	0,00005	0,00006	0,00005	0,00004
<i>Average characteristics per capita (kg/people)</i>				
Steel production	419,06	467,46	476,56	492,31
Consumption of ferrous metals scrap	97,77	127,79	123,39	119,19
Production non-ferrous metals	35,09	37,89	37,76	44,07
Consumption of non-ferrous metals scrap	14,42	18,70	19,88	18,46

Source: The Federal State Statistics Service of the RF, the Ministry of Industry and Trade of the RF.

Existing licensing procedure for activities of recycling SMR in Russia involves obtaining by economic subjects of separate licenses to conduct the operations of purchase, processing and sales of scrap and wastes of ferrous and nonferrous metals. Dynamics of changes in the number of legal entities with their respective licenses (not necessarily coinciding with the composition of really working companies in the market) is presented in Table 3.

The preliminary typology of the enterprises in the SMR-Industry reveals the several structural clusters in the collection and processing of scrap and waste of ferrous and non-ferrous metals, which are presented by any aspects: the degree of economic independence; n comprehensiveness production cycle; the level of activity (and partially characterizing the scale of business. In the course of the study were identified processes: the consolidation of the SMR-Industry (for example, in the period 2008-2013. number of licensed companies in the market of ferrous scrap decreased from 3636 to 2029, and the market of non-ferrous metals - from 3097 to 1618); the technological specialization of enterprises and organizations (collection and purchase of scrap,

including the centers of procurement; storage and preprocessing of scrap; processing scrap; sale of product scrap recycling); the stabilize prices of the scrap of ferrous and non-ferrous metals (such as the price of 1 ton of ferrous scrap in the world market in the last 3 years was in the range of 390-420 dollars, while the volatility of the ratio of prices in the domestic market has average value of 76.93% and variance 0.0002); the reduction and obsolescence of industry capacity (retirement rate exceeds the ratio of input power). For example, the total number of shredder installations determining overall technological level of utilization of SMR is only 13 complexes with a total refining capacity of about 5.7 million tons of scrap metal per year, whereas in the USSR at the beginning of the 90s, there were more than 100 with a capacity of over 32.5 million tons per year.

**Table 3: The companies of the SMR-Industry with licenses (ferrous/non-ferrous metals)**

Region	2008	2009	2010	2011	2012	2013
Total, including	3636/3097	2693/2219	2250/1687	2015/1570	1983/1536	2029/1618
Central Federal District	790/884	665/727	532/494	475/493	491/479	505/455
Northwestern Federal District	595/507	281/507	215/162	211/135	222/140	208/137
Southern Federal District <sup>*)</sup>	547/308	433/263	368/207	291/166	366/227	316/262
Volga Federal District	681/623	527/456	469/370	445/362	364/337	422/368
Urals Federal District	387/255	292/178	290/166	275/149	270/152	278/166
Siberian Federal District	409/284	325/232	241/165	206/148	164/105	179/107
Far Eastern Federal District	227/128	170/97	135/86	112/81	106/68	121/81

<sup>\*)</sup> Including the North Caucasus Federal District

Source: The Federal State Statistics Service of the RF, The NP NSRO “RUSLOM.COM”.

## CHALLENGES OF THE TRANSFORMATION

To create a sustainable and effective technologic and economic complex of national system for recycling of SMR requires addressing the complex challenges of regulatory, organizational, economic, scientific and technical type. Essentially we are talking about forming a new industry in which economic activity will focus on: the providing of highly profitable domestic steel secondary raw materials; the safe utilization of decommissioned complex polymetallic-containing products and devices for industrial and domestic purposes – ELU (Convenient to introduce the notation “ELU” (End of Life Units), generalizing widely used acronyms: ELV (End of Life Vehicles), EEEEE (End of Life Electrical and Electronic Equipment) etc.); the reducing of the level of anthropogenic impact on the environment; the conservation of the natural resources for future generations; the implementation of the principles of sustainable development in Russia.

The main objective of the development of a national recycling system of SMR is the ensuring demand for production of processing scrap and metal waste in necessary nomenclature, quality and quantity of supply for sustainable development and competitiveness of metallurgy and all industries in Russia. Now one of the major structural elements of the SMR-Industry becomes the self-regulatory organization (SRO) for the enterprises by collecting and processing of scrap and recycling of ELU. The role and place of the SRO with association by the Federal Agency for Technical Regulation and Metrology of the Russian Federation in the organization and regulation of SMR-Industry determined by the structure of the life cycle of materials for the complex polymetallic-containing products and devices and polymetallic-containing components (MCP) for the industrial and domestic purposes.

Conceptually the adherence to the relevant international standards and the principles in the field of environmental protection and resource conservation is a prime importance for the development SMR-Industry. Compliance with the priorities of the activities of waste management of production and consumption involves the implementation of measures to ensure the following hierarchy of principles: prevention, reduce, reuse, recovery, recycling (including the use of material and energy potential) and the safe landfilling. Practically for define a strategy for further development of the utilization of SMR required to make: the comprehensive assessment of the companies collecting and processing scrap and waste metals; the identification of technological trends and change institutional environment of their functioning. Developing the concept of long-term development for SMR-Industry, in essence, new for the Russian economy requires the construction a system for the modeling and predicting of the dynamics of the main indicators of the companies and organizations for the collection and processing of scrap metal and recycling decommissioned complex

polymetallic-containing products. This led to the execution of works on the analysis of the status and prospects of development of predictive assessment recycling system SMR. The environment of functioning, the quality of retrospective information, as well as a high activity of economic agents in the industry in the period of its transformation dictates the choice of *scenario modeling* as the main tool of predictive study to obtain information predicative satisfactory quality.

## DEVELOPMENT OF RECYCLING: SCENARIO MODELING

The technological state and the institutional formation of SMR-Industry predetermines the formulation of the forecasting problem is not as extrapolated trends, but how to design a harmonized vision of the future with optimized parameters for potential management decisions in a distributed management structure (regulation) of the integrated economic objects.

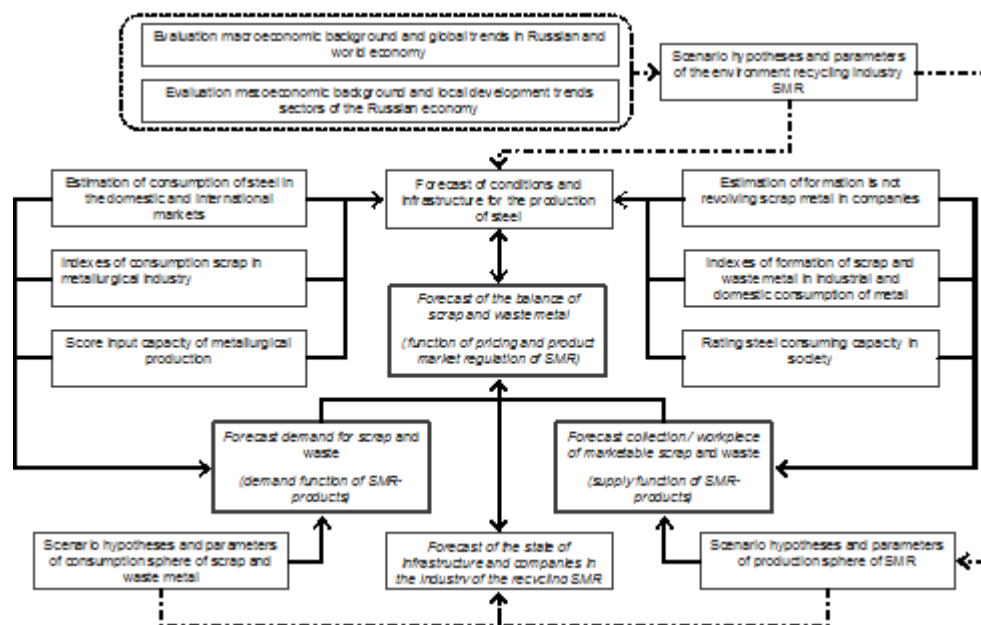
In the complex of scenario modeling, the overall structure is shown in the work (Pisareva O.M., 2013), was identified the system of econometric models and were developed relations of balance describing the basic technological, logical and chronological relationships in the processing of SMR.

The raw material base of SMR-Industry is the accumulated fund of metals in the country in the context of the various industries and households, as well as external market of scrap metal. The consumers of the SMR-Industry's products are the steel mills, the foundries divisions of the mechanical engineering and metalworking, the external market of the products processing SMR.

*Sources of variation* in the internal and external environment for the functioning of the industry define the following grounds for forecast dynamics of formation of alternative scenarios of the development course: 1) the macroeconomic aspect: ranges and rate of change of the key indicators of development of the Russian economy and the world (according to the official data of predictive calculations considering the indicative nature of the impact on the intentions, plans and actions of undertakings of the SMR-Industry); 2) the technological aspect: the integration of resource trends (reduction of material processes, including of metal, industrial products and consumer goods), and material substitution (replacement processes in the finished product of one kind of material other conservation and / or imparting new properties); 3) the technical aspect: ranges and rate of change of the technical parameters of the equipment for collecting and processing secondary metallurgical raw materials; 4) the organizational aspect: the characteristics of the organization the collection and treatment of secondary metallurgical raw materials; 5) the investment aspect of the composition and structure of the investment programs of modernization of existing and creation of new reclamation of secondary metallurgical resources; 6) the administrative and legal aspects of the composition and nature of government measures to stimulate the collection and processing of scrap and waste metal and recycling of ELU (Federal Law of June 24, 1998 № 89-FZ "On waste production and consumption" and the proposed changes and clarifications in legislation). For generating of the alternatives of the SMR-Industry's development collectively these requirements lead to the concept of predictive studies presented in Fig. 1. The development of generator forecast of a national system of recycling waste and scrap of ferrous and non-ferrous metals involves an assessment of the general trends in the format description of the qualitative parameters of the metal flows in the strategic programs of industries.

In accordance with the principles of scenario modeling (Pisareva O.M., 2013) in the framework of process-oriented methodology for forecasting can distinguish quality alternative scenario parameters depending on the set of relevant events and the future performance of design hypotheses for the SMR-Industry (based on subsequent implication of the key parameters of the strategic development of metallurgy - the main consumer of the SMR-products). Since the initial implementation of the hypothesis of the ball forced scenario of socio-economic development of Russia, so the variation in the assessment of the functioning of the industry dynamics perspective provides the task of scenario parameters characterizing the main "internal" uncertainty about the future: the composition and schedule of administration for a utilizing fees; the structure and timetable for the introduction of technological regulations; the scale and pace of changes in the environmental discipline of the population (to describe the behavior of households). Among the "external" factors (and events) uncertainties were chosen intensity of metals substitution in GDP, consistency and rate of targeted programs of development of basic industries (upstream and downstream sectors of the technological cycle).

**Figure 1: Overview of scenario modeling forecasts of the industry recovery and recycling of waste and scrap of ferrous and non-ferrous metals**



## ESTIMATING PARAMETERS OF THE SCENARIOS SPACE

For the given parameters of the baseline scenario were estimated ranges indicators: the individual development rates of SMR-Industry and the forecast balance secondary metallurgical resources (in format of Table 1); the structure of the SMR-Industry. Analysis of the average annual growth rate for the base case of the scenario forecast showed (see Table 4) that on the period up to 2025 is allocated three interval relations of production and consumption waste products of SMR-Industry: a lagging growth of supply to 2015; an ahead falling of supply to 2020; a decelerating lagging of supply to 2025. The estimates obtained ranges for the main indicators of the SMR-Industry represented in Table 5. The data shows in the period 2015-2017 possibly will sharp increase in the deficit of scrap metal, which is associated with a significant enlargement of the demand for metals.

**Table 4: Characteristic of the average annual growth rate (CAGR) of collection and consumption of scrap metal in the Russian economy (base case scenario, %)**

Index	CAGR		
	2012-2015	2015-	2020-
Collecting of scrap, million tons (generalized supply function)	2,11%	-2,71%	-0,17%
Consumption of SMR, million tons (generalized demand function)	12,16%	3,68%	3,80%

This is due to the implementation of development strategies, the most metal capacity industries of the Russian economy: mechanical engineering (including MIC), energy (especially in the sector of nuclear energy) and transport construction (including rail). It should be noted the stimulating significance which has funding mechanism for priority strategic programs through the National Welfare Fund. This has a compensating effect some reduction in evolutionary growth of Russia economy (especially in the context of pseudo economic sanctions). Calculations for different variants of the base scenario set have allowed establishing: appearance in the interval 2016-2017 and a further increase in the deficit of scrap; short-term and negligible effect of covering the deficit by restricting exports of scrap metal (time lag of deficits - 2-3 years).

Table 5 contains an integrated data on possible technical coverage deficit sorted by the natural hierarchy of measures to manage the demand on the domestic scrap market: redistribution of volumes of exports; change

the structure of the steelmaking raw material and mobilizing resources to increase the total scrap collection (including taking into account the potential to build up production capacity for the utilization of ELU, but without identifying and evaluating sources of financing their creation to cover the deficit). Data processing and analysis for recurrent scenario calculations allows a qualitative identification and assessment the structure of the scenario space. Thereby justified stability ranges agreed development trajectories in a multilevel and multisubject economic environment. Thus, the analysis of historical data and target indicators of socio-economic development of Russia allowed obtaining the necessary predicative information.

**Table 5: Dynamic evaluation of the forecast ranges for indicators aggregated balance of SMR (fragment for the ferrous metals, million tons)**

Index		2013	2015	2020	2025
Steel production:	<i>upper*limit</i>	69,62	74,72	84,99	95,14
	<i>lower limit</i>	59,86	59,92	69,79	67,91
Collecting scrap:	<i>upper limit</i>	26,69	26,06	22,72	22,53
	<i>lower limit</i>	25,62	24,02	22,39	21,03
Revolving scrap (in metallurgy):	<i>upper limit</i>	6,57	6,28	7,30	8,19
	<i>lower limit</i>	5,65	5,04	6,00	5,84
Import of SMR:	<i>upper limit</i>	0,28	0,22	0,27	0,35
	<i>lower limit</i>	0,24	0,18	0,16	0,16
Export of SMR:	<i>upper limit</i>	4,98	5,77	5,60	5,58
	<i>lower limit</i>	4,72	5,38	4,82	4,89
Consumption of SMR:	<i>upper limit</i>	24,41	28,33	33,95	40,90
	<i>lower limit</i>	20,81	22,54	27,74	29,09
Deficit (-) / profit (+) of balance:	<i>upper limit</i>	5,48	0,74	0,18	0,04
	<i>lower limit</i>	3,87	-1,75	-9,52	-15,77

\*) It is not the probabilistic assessment of the confidence intervals in the statistical forecasting. Here we give a combinatorial integrated assessment for related parameter changes on aggregate impact factors scenario defined on the incidence matrix (mutual influence).

## OBJECTIVES OF THE DEVELOPMENT SMR-STRATEGY

The scenario modeling technique provides identification of organizational, technical, financial and economic characteristics of the combined vision of the future of the SMR-Industry. The process of transformation in the sphere of economic activity for the collection and processing of scrap and waste metals and recycling of ELU, which determines the basic goal setting and task management, is characterized by next priority areas of innovation: *metallurgy sector* - a minimill's infrastructure (a secondary metal producer); consumption of refined products of secondary metallurgical raw materials; *recycling sector* - infrastructure industry utilization of SMR: processing of products of secondary metallurgical raw materials; *infrastructure* of collection and processing starting secondary metallurgical raw materials (waste and scrap); *infrastructure* of procurement (reception), dismantling and preprocessing utilization of the decommissioned polymetallic-containing products; *environmental security sector* - infrastructure for the safe landfilling of the not recycled waste after processing secondary metallurgical raw materials and the protection of the environment.

Note that licensing in the SMR-Industry subject to SRO standards will become mandatory from January 1, 2016. It provided for the phased introduction of the recycling fees. From January 1, 2014 recycling fees paid by all car manufacturers and importers of Russian cars. From January 1, 2015 defined the expanded list of products. From January 1, 2016 introduces a requirement for the entire range of products. Estimated amount of funds annual fees is about 200 billion rubles. Main goals and objectives of transformations in the sphere recycling of SMR: 1) the spatial diversification of production and the optimization of a logistical solutions in the sector of secondary metallurgical raw materials; 2) the modernization of utilization enterprises SMR, modernization and creation of new equipment and technologies for processing of secondary metallurgical raw materials; 3) the improving of a national network by collection of household and industrial waste of ferrous and non-ferrous metals, modernization and creation of new equipment and technologies pretreatment secondary metallurgical raw materials; 4) the establishment of a national network by reception a decommissioned complex

polymetallic-containing products, modernization and creation of new technologies and equipment dismantling and selective processing of recyclable materials and components products (constructs); 5) the formation of a national network by “civilized” recycling and landfilling of waste recycling of secondary metallurgical raw materials, modernization and creation of new equipment and technology of utilization (including energy), as well as the concepts and the technical solutions on the safe landfilling for the not recycled waste.

Found the boundaries of space and sustainability assessment of scenarios can be refined taking into account the experience of the organization, which generalizes the knowledge and competence of qualified specialists in the field of technology and economics of recycling. On the basis of relationships borders scenic space was formed consistent image of the future, some of the characteristics of which are described by qualitative formula: From historically perfect centralized systems in the administrative economy - Through disruptive processes and subsequent recovery mechanisms of state regulation in the transition economy - To high-tech self-regulating cluster of diversified competitive sector in the social economy. To create the national recycling system of SMR as a technologically perfect and environmentally secure, cost-effective and an attractive investment industry of processing waste and scrap of ferrous and nonferrous metals should: determine the decomposition of strategic development goals; substantiate the need to adjust the legislation regulating the activities of enterprises and organizations; determine the composition of the task to modernize enterprises and organizations; develop a road map for the implementation of the development strategy; identify and assess the risks of the development strategy; develop procedures and mechanism of formation and use of a special reserve fund for utilization of goods (products) in Russia; substantiate and develop measures of state support for industry, in particular to ensure the transfer of advanced technologies, to stimulate R&D and investment projects in the Industry.

## **SUMMARY AND CONCLUSIONS**

Study confirmed the active and variability forecast showed good informative and operating properties of scenario modeling method for prediction and projection of the development of complex economic objects in conditions of management multilevel organizational systems. Key importance to create an array of relevant and complete data required to create a panoramic vision of the future, including the tasks agreed strategic and tactical planning, is the efficient organization of the process for reproduction of predicative information for all levels and control channels in the SMR-Industry. Further on the basis of a set of predicative information and analysis of results of scenario modeling is supposed substantiate and develop the strategy and the program development of industry for utilization of secondary metallurgical resources in the Russian economy.

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# AGE MANAGEMENT - A NEW CHALLENGE: CASE STUDY FROM THE CZECH REPUBLIC

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## ABSTRACT

*Despite the risks of population aging being known in Czech society, this irreversible phenomenon is not sufficiently reflected in the work of personal managers or the long-term strategy of firms. It is alarming that firms in the Czech Republic unequivocally prefer younger employees to older ones. In some key traditional industries such as mechanical engineering, the previous experience, and skills will be passed on insufficiently (Putnová, 2012). Despite the theory being already well researched in the Czech Republic, its implementation is still lagging behind the developing countries.*

**Keywords:** Age management; Corporate Social responsibility, Czech Republic

## INTRODUCTION

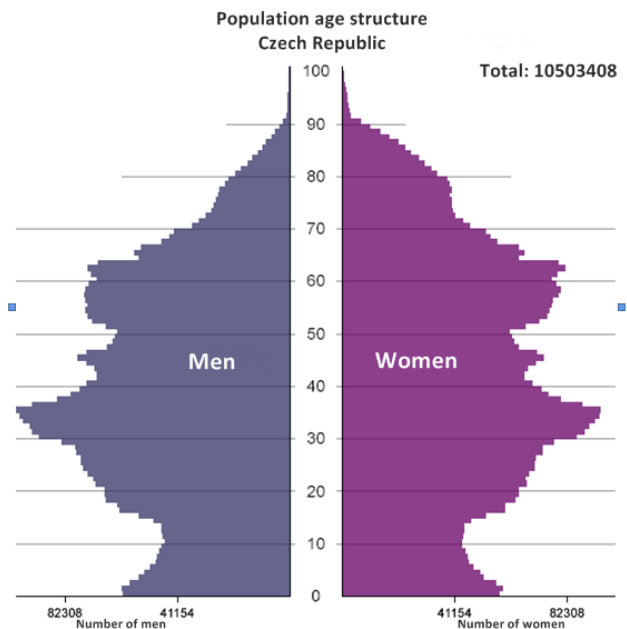
This paper analyses each factor of corporate social responsibility against the background of age management. Using an analysis of secondary resources, it points out the possibility of a CSR framework being used for implementing the objectives of age management (Age management is personal management respecting age. For the purposes of this paper, age management is perceived as full exploitation of human capital particularly that of senior citizens. In its broadest sense, however, it includes all age brackets). The paper also suggests measures to be undertaken by firms to accelerate age management

Competitiveness is becoming a major topic for firms viewed macro-economically in a national scope. Attention is paid to exploiting resources both physical and intellectual. In recent years, it is increasingly clear that using and developing human potential is a key driver of competitiveness. In the Czech Republic, it has been receiving considerable financial and in-kind support from the EU funds. A big problem faced by the Czech Republic and the EU in general is the aging of population. The slumping demographic trends will have a number of impacts on economy and society. The longer lifespan and low birth rate will be the main factors influencing health and retirement policy of governments. This will of course have a strong impact on competitiveness.

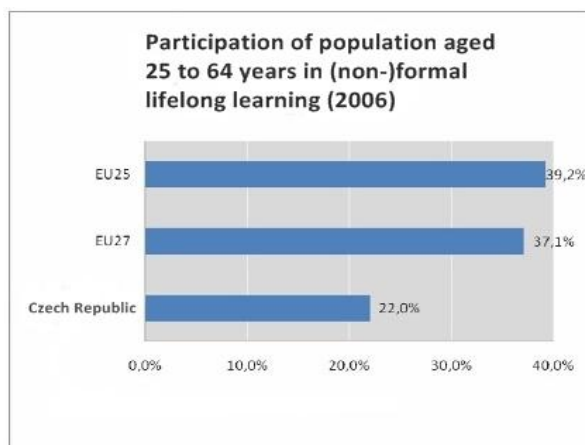
In recent years, baby boom has been the talk of the media. However, what is mistakenly termed baby boom by the media has in fact been caused by the strong generation of the 1970's reaching parenthood. This may hardly be called a baby boom. On the contrary, the 30+ generation has not reproduced itself. The birth rate culminated in 2008 with 120,000 children born. This is no doubt a gratifying number compared with the 90,000 children born at the beginning of this century. However, the strongest years of the 30+ generation saw a birth rate of 195,000 children per year.

The European Union is aware of this problem and, therefore, a number of EU projects relate to capitalizing on human potential. The Czech Republic will receive up to 798 billion CZK from the EU funds from 2007 to 2013 of which more than 100 billion CZK will be used to support the development of human resources in several programmes. In the following programme period 2014-2020, much attention is paid to senior citizens and prevention of social exclusion, which also includes seniors. The European Commission also calls for an improvement of labour conditions for senior citizens. This is also reflected in the policies of national governments. Let us mention some of the measures undertaken by the Czech government: By a government

resolution of 16<sup>th</sup> November 2005, a Government Council for Senior Affairs was established to deal with creating conditions necessary for seniors to have access to jobs. In early 2006, a consultative body was established at the Ministry of Labour and Social Affairs with this age group represented. One of the priorities chosen by the Czech Republic during its EU presidency in the first half of 2009 was dignified aging and protection of senior citizens. Consistent application of regulations relating to labour is necessary to create conditions favourable to senior employment. The process of demographic decline and aging of population is much more intensive in the Czech Republic than in the EU member states. Since the beginning of the 1990's, the overall fertility indicators have plummeted to be among the world's lowest today. According to some forecasts, in 2025, the proportion of dependent 65+ population to the 20 to 64 age group will reach almost 40 percent, which is the double of the 2000 figure (Jouza, 2010).



The lifelong-learning issue has been gaining importance, too. Despite the heavy EU and private investment into this area, the Czech Republic is still lagging behind.



Source: NERV 2011

A comprehensive approach to education does not involve only well structured educational laws, but also ones regulating related areas such as family, education recognition, degree nostrification, immigration, etc. These and others should be based on consistent concepts complementing each other. At present, a concept that can embrace a large number of such comprehensive concepts is CSR.

Many requirements of age management are integral parts of CSR. Social responsibility is a modern business concept taking into account not only the aims and objectives of a particular firm but also social and environmental issues. Special attention is paid to employees, their personal and professional development and to prevention of all forms of discrimination including age-related one. CSR requires long-term orientation towards long-term objectives and willingness to work for an overall improvement of society. The arguments presented by those who have criticised social responsibility over the last decades are becoming less acceptable. Due to the real danger of imminent environmental disasters for once, but also because of a fear of potential conflicts and social instability, strikes, etc. The importance of this issue is also attested by inquiries proving better performance of companies actively embracing social responsibility. The European Union provides unequivocal support for companies complying with social responsibility principles while requiring that a number of measures should be undertaken that are not among the legal regulations of the member states. The topicality of this programme is proved by a number of activities undertaken by the EU. In March 2006, the European Commission presented a new alliance between the EC, the member states, and the European enterprises. In this programme, the European Commission stresses the voluntary nature of CSR and the key role of firms. Proving the close relationship between CSR and age management is one of the aims of this paper.

## **MATERIALS AND METHODS**

Over the last ten years, the BUT Faculty of Business and Management has successfully worked on several important research projects related to corporate social responsibility, innovations, and diversity management. Some parts of this paper use the author's own teaching materials presented or published earlier, some of them in cooperation with other co-authors (Černohorská & Putnová, 2012). Another methodological approach consisted in analysing the present position of senior citizens in the labour market using both statistical data and long-term trends observed in Czech society. The paper uses secondary data reassessing CSR in view of a possible correlation between the social factors in the Czech Republic and senior citizens in the labour market. Synthesis of such materials was one of the things that triggered this paper providing a comprehensive view of the age-management issues as encouraged and led by the CSR concept. The results and recommendation of the paper should be further tested. We believe that qualitative research of a sample is the best method and will be used to get a better understanding of the problems in question.

We take this text to be an introductory material to dealing with the age-discrimination-related issues with a proven CSR concept. To our knowledge, no one in the Czech Republic has yet viewed the problems of age management from this angle. Despite the clearly defined limitations given by the necessity to verify the results empirically, we believe that this approach can be viewed as pioneering.

### **Corporate social responsibility and its importance for age management**

In the following part, we will look at the development and characteristics of CSR and its impacts on age management.

### **Development and definition of corporate social responsibility**

The question of corporate social responsibility is rather complex and, in the last fifty years, diverse theoretical streams have emerged. Some authors such as Hindle, 2003, think that corporate social responsibility has been developing in parallel with stock companies and, in many cases, CSR issues were first conceived as early as the 19<sup>th</sup> century.

Corporate social responsibility is an umbrella concept with no unequivocal definition. For example, it includes the concept of "sustainable development" or "good citizenship". When classifying CSR, three main pillars are considered - economic, social, and environmental. Corporate social responsibility is manifested by an open dialogue with all the groups involved that affect the operation of a company. A responsible attitude of the stakeholders is also important for them to be seen as reliable partners.

## Characteristic of CSR

The generally accepted CSR doctrine is based on three pillars: economic, social and environmental.

**The economic pillar** in the concept of corporate social responsibility represents

- drawing up an ethical code of conduct for firms
- adopting corporate governance principle (see OECD directive)
- transparent conduct
- continual dialogue with the stockholders
- anti-corruption policy
- protection of intellectual property
- defining relationships to customers, investors, and suppliers

**In the social area**, corporate social responsibility involves

- continual dialogue and cooperation with the stakeholders
- development of human resources to ensure health and safety of employees
- taking care of the employees' work life balance
- equal opportunities (not just for men and women but also for other handicapped groups)
- observance of human rights in the workplace
- ban on child labour
- development of human capital
- firm's charity

**Environmental activities** focus on

- framing the firm's environmental policy
- environment-friendly production, products, and services
- protection of natural resources
- activities towards reducing negative impacts on the environment

## Knowledge transfer

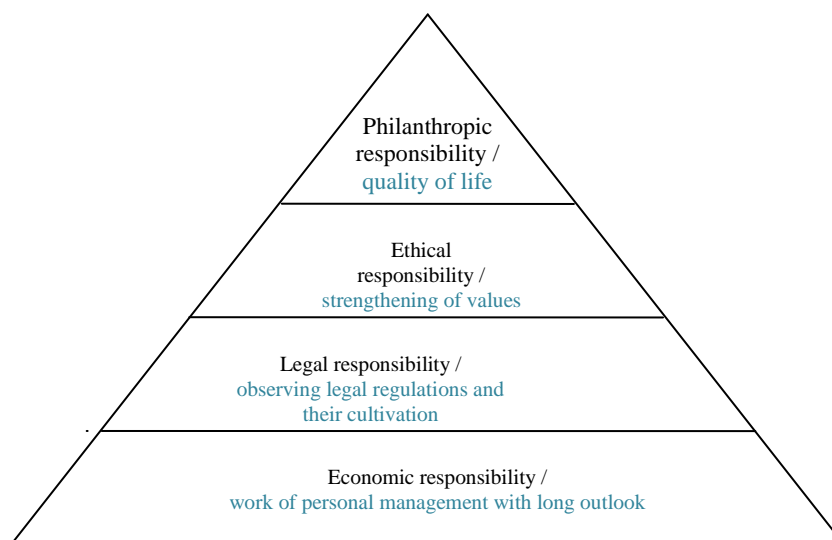
Transfer of employees' knowledge forms the basis of knowledge economics, by which employees and their knowledge are the organisation's basic competitive edge and performance growth potential. However, an employee leaves a job along with his or her knowledge. The loss of an employee's knowledge affects the company as a whole especially if it is a key one. At present, a rather efficient knowledge transfer exists between the current employees (horizontal transfer) in team cooperation to deal with the difficult situations and problems encountered. However, the absence of knowledge transfer between generations (vertical transfer) may bring about loss of the organisation's competitive advantage and performance. For this reason, the knowledge continuity management aims to find a suitable successor to a leaving employee to prevent loss of knowledge associated with such an employee. If companies fail to implement a system of knowledge transfer, particularly from older employees, their performance is at risk. The ability to preserve the continuity of key knowledge has a growing importance for a company's competitiveness and performance. It is no doubt among the key value drivers of each company (Režňáková, Putnová, Videcká, 2013).

## CSR and its intersections with age management

The basis for CSR implementation is formed by economic responsibility. It follows from the above that the competitiveness of firms and the country depends on the way the human potential is fully used, which involves also people viewed as old (50+) in the Czech Republic. The Czech economy can hardly do without these people, who bring their previous experience and skills with them. The personal management of both public administration and private companies will have to change its attitude to the employees of this age group

(Putnová, 2012). Adulthood has been reached now by the generation born in the years with the weakest birth rate in all the history of the Czech Republic and Czechoslovakia. Changes in the labour market over the following two decades can be expected in the wake of this development. In addition, there are a number of stereotypes and prejudices connected with employing senior citizens in the Czech Republic. According to an enquiry conducted by a labour research institute, for example, more than twenty percent of the Czechs think that it is the wish of managers to get rid of old employees. Thirty-five percent of the respondents blame the older persons for not willing to leave their positions to make place for the younger ones and fifteen percent believe that there is no use in people over fifty improving their qualification. Concerns of people about losing their jobs rapidly increase when they reach the age of about forty (in Jouza). The intersection of this CSR level is the work of personal management with a long-term outlook for maintaining the competitiveness of firms. Ethical responsibility relates to values that can be implemented through age management. This is respect for a human being in the first place, without discrimination of any type including age discrimination. Responsibility is also for creating age-diversified teams. Such teams guarantee sufficient transfer of previous experience and skills. In this connection, it would not be correct not to mention age discrimination against young people without previous experience. The value of a human being should not be judged by his or her age. It is this aspect of age discrimination that meets with a number of prejudices and barriers that will require raising public awareness and wise approach of those who are in charge of employee policy at all levels. The intersection of this level is the strengthening of the basic human values and their consequent implementation. Philanthropic responsibility connected with charity means intentional cultivation and strengthening of the quality of life of those who, due to the circumstances, cannot fend for themselves. These may be disabled or old people. The quality of life of these people is part of CSR cultivating the internal environment in firms, enhancing their sensitivity, and upholding the sense of justice. Charity inside a firm strengthens loyalty to the firm and improves the quality of life.

### Intersections of CSR and age management



Source: Authors after Carroll, A.B. in Putnová, A., Seknička, P. 2007.

## RESULTS

An analysis of the relationships of CSR elements to age management suggests that CSR is a suitable framework to be used by firms in applying age management. It is also clear that the basic theses have their limitations, barriers, and habits, which are deep-rooted. One of the unwritten rules is taking in account the length of total employment in a field. Also for this reason, firms prefer younger employees because they are less expensive. This effect is especially apparent in women.

Shared job positions have not yet found sufficient footing in the Czech Republic. What is missing is strategic planning from the viewpoint of personal management. If, in 2030, there are going to be forty percent of

people older than 65 years, it is an alarming fact, which should be taken seriously by large companies and public administration already today. The fact that the supply tops the demand in today's labour marketplace may lead to a false feeling that labour force is abundant and no special measures have to be undertaken. These include outplacement, an instrument still little known. It is a form of creating lasting relationships with the employees that had to be laid off by the firm, but whose knowledge is expected to be used in better times. Another negative feature is the 35-years-of-age limit, for an employee to be considered when applying for various grants and the present perception of personal management. This is discriminative especially for women who, after having fulfilled their maternal duties, are not eligible for such grants (Nesvatbová & Putnová, 2007).

One third of the people in the Czech Republic believe that older employees should leave their positions to the younger ones if concerned about their jobs. This is a vicious circle that can be broken by corporate social responsibility concepts applied through conceptual policies. One of the results of analyses and observations is a proof of the suitability of CSR for an age management framework.

## CONCLUSION

One of the solutions appears to be elaborating on corporate social responsibility, which represents a suitable framework for implementing age management. Being already known, this concept can be a basis for corporate policy. It is insufficiency and shortsightedness in managing human resources that engenders risks of losing competitiveness. The task that Czech society is facing in the near future is creating conditions favourable to employing senior citizens, removing barriers and redefining the age limit for an employee to be "considered young", which is 35 years at present. It is not only the advantages of young employees but also those of the older ones that should be pointed out. Apart from their maturity and rich previous experience, they are more appreciative of their jobs seeing them as opportunities of self-fulfilment. This paper aims to show that age management is not concerned with just singular unresolved or neglected issues, but is closely related to corporate strategies. CSR offers an opportunity for Czech firms to cope with this requirement in terms of values and processes. Only a comprehensive approach to such multi-tier problems can bring positive effect, that is, better competitiveness.

*In Czech society, age management faces a number of major tasks to be worked on by the HR staff in firms and by the top management and opinion makers. Czech firms still insufficiently use known tools to implement age management. Czech society is also little helpful in employing senior citizens. An efficient tool for changing the corporate practice may be the application of CSR, which, based on our analysis, is suitable for implementing the objectives and values of age management. This paper pointed out some weaknesses and proposed a procedure for removing the barriers and coping with the risks faced in the future because of insufficient exploitation of human capital.*

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# **THE MYTHS AND REALITIES OF MANAGEMENT PRACTICES: EVIDENCE FROM NKANGALA HEALTH DISTRICT, MPUMALANGA PROVINCE IN SOUTH AFRICA**

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## **ABSTRACT**

*The purpose of this paper is to investigate the management practices used by the district management team in ensuring effectiveness and efficiency in the provision of services to the sub-districts. Primary data were collected through focus group with 8 managers in the leadership and management commission of the broader workshop. Data collection lasted for a period of three days. The results of the research demonstrate that there are challenges in managing the district effectively. These challenges are characterised by over management of the workforce, lack of role modelling and lack of leadership as well management skills. The findings also indicate that there is poor implementation of policies in the district. Furthermore, there is an indication of victimisation and intimidation of managers by union strong holds. The findings further demonstrate that there is lack of skills and capacity among some of the managers. The research was limited to one district and the other two health districts in Mpumalanga were excluded from the research. The findings provide valuable insight on how the district is managed and the challenges associated with provision of effective leadership and management. Very important, recommendations made in this paper could be of benefit to other districts in improving their managerial practices.*

*Keywords:* district, leadership, legislations, management practice, planning.

## **INTRODUCTION**

Complex service organisations find it hard to avoid process variation that leads to poor service quality (Tucker and Edmondson, 2007). Notably, process variation stems from ill-defined procedures and processes. The importance of health management has long been prioritised by the South African government to embark on best practice. In order to implement best practice and effective and manageable health system, it is imperative to also possess competent and able leadership. In the quest to create an effective health system, Department of health created three districts in the province, namely, Ehlanzeni, Gert Sibande and Nkangala. Each district is managed by a District Manager at the level of Chief Director with directorates in different disciplines such as corporate, primary health care, human resources, finance and transport. Gilson and Daire (2011) indicate that both management and leadership are essential in health system development, and wider experience suggests that bringing efficiency in the health system requires good leadership. In order for the district to run effectively, leadership and management become imperative. In running the affairs of the District, it is important for the management of the district to have certain level of delegation from the Provincial office. The delegation ranges from making certain appointments, financial delegation and other related activities associated with the effective managing of the District.

There are differences between management and leadership. In this case, management focuses on being efficient, doing things right. Mullins (1996:398) regards management as taking place within the structured organisational setting and with specific roles; directed towards the attainment of aims and objectives; achieved through the efforts of other people and using available systems and procedures. Robbins, DeCenzo and Coulter



(2013:28) further define management as the process of getting things done effectively and efficiently, with and through other people. From the definition, it emerged that management focus more on the completion of the activities at a certain timeframe getting the most outputs using minimal inputs or resources. This however, requires the effort to pull in many resources and use knowledge from many disciplines to foster the creativity required to keep an organisation alive and effective (Service, 2010:25). The role of management in this regard is to ensure that the set of objectives are attained. The management should however execute their activities based on four management functions namely, planning, organise, lead and take control of how activities should be carried as depicted in the figure 1. Essentially, effective managers should understand the purpose of the district, the people that they serve, namely, the sub-districts and environments in which they operate. Messner, Clegg and Kornberger (2008:70) indicate that management practices alerts us to what it is that is done, how it is done and how it is possible that it be done. Verbeeten (2008) posits that efforts to reinvent the government and improve performance in the public sector organisations have essentially focused on the performance management practices. This however, relates to specifying goals to achieve, allocating authority and measuring and evaluating performance.

**Figure 1: Management functions**



Source: Adapted from Robbins *et al* (2013)

Based on the figure above, it is imperative for the management to use the primary management functions in the execution of their mandate. First planning plays a pivotal role in every organisation. This however, includes defining goals that need to be achieved and developing operational plans to coordinate activities that will contribute towards the accomplishment of the set goals and objectives. Proper planning enables management and staff to be focused on the imperatives of the organisation. Management is essentially an organisation activity, the organisation of work and resources, to achieve success. The successful organisation of work and resources requires careful planning and should one fail in planning, the efforts anticipated are likely going to fail. Second, organising is another primary function which management should pay attention to. This is crucial because it ensures that work apportionment and responsibilities are allocated to the staff in the organisation. For the staff member to fulfil their responsibilities, resources should be allocated accordingly. Third, leading which depend mainly of the competencies of the managers. Essentially, efficient managers should be able to motivate employees reporting to them. They should further give directions to employees regarding their activities so that they accomplish organisational goals and purpose. Fourth, controlling and with this function, managers should understand their level of responsibility and authority that they have over employees as well as their activities. Understandably, managers in this regards are mandated to monitor the activities of their employees to make sure that the job is done in accordance with the set goals. In case there are deviations from the plans, corrective actions should be implemented.

In contextualising management, it is important to understand variation of managers that administer and those who lead as depicted in table 1.

**Table 1: Key features of leadership mind-sets**

Managers that administer	Managers that lead
Focus on individual actions	Focus more on collective actions
Blame others for problems	Take responsibility for challenges and take initiative to address them
Preoccupied with own needs and interests	Demonstrate generosity and concern to pursue common purpose
Express despair and cynicism about problems and obstacles preventing change	See possibilities to make things better

Sources: Adapted from Galer et al (2005)

From the above table, it can be deduced that becoming a manager who leads requires tremendous change in the mind-set of the individual (Gilson & Daire, 2011). In the context of this, instead of understanding management as key administrative function, constituting the implementation of set objectives, tasks and directives, it is essential for such managers to see management as a dynamic and a strategic process occurring in the milieu of changing and uncertainty. In terms of the above table, it is noted that managers who lead focus more on collective action. This essentially means that such managers prefer team work and consultation with the team members. Above all they take full responsibility of the action of the team. Managers who lead take responsibility of challenges and initiative to address them. As reflected on the table above, it is notable that managers who administer are far different from those that lead. Managers who administer may be regarded as selfish and are not committed to the common purpose of their respective organisations. Service (2010) posits that management is about keeping people informed and doing the right things effectively. These types of managers are not in position of taking decisive steps to address organisational challenges, instead blame the system and other people.

In taking a lead in the management roles, it is imperative to understand the importance of values. First of all, personal values guide the daily decisions leaders make and the behaviour they display to others. In this case, role modelling is essential so that the followers are able to emulate what efficient managers do and as such their self-efficacy will increase. According to Kondlo (2012:551) lack of self-confidence is a major problem among black knowledge workers. Gilson and Daire (2011) argue that values can be seen as motivational for managers stimulating them to take responsibility and use their competencies in providing leadership in the workplace.

Leadership in the public sector is imperative in the sense that if organisations have no effective and strategic leaders; they are likely going to experience managers who are unable to give direction and not take strategic decisions. Leadership is about being effective, doing right things. This notion is in line with what Mokgolo, Mokgolo and Modiba (2012:1) that line managers are sources of influence on leadership acceptance and job satisfaction. In the context of this, employees who regard their leaders as effective, they are likely to have positive, open-mind towards the leaders and develop a more accepting attitude. Gilson and Daire (2011) posit that it is often argued that leadership is provided by top management of the organisation which is a fallacy. The idea of decentralised leadership emphasises that leadership must be regarded as a collective capacity in any organisation. This notion is in line with the decentralisation strategy whereby the Department Health in the Mpumalanga province has three districts. The rationale for district health system is to allow districts to work and make decisions within their complex environments as well as to develop a right based health system that promotes health equity and ensure efficient and effective management system. Takala (2005) indicates that leadership scholars discuss the importance of impression management who suggested that charismatic leaders usually engage in impression management techniques with the view to enhance their image of competence, increasing subordinate or followers' compliance and faith in them. In the context of this, leaders embark on exemplary practices which the followers may emulate in their practices. In modern management practices, leadership considers leadership as a process in which leaders are not seen as individuals in charge of followers,

instead as members of a community of practice (Takala, 2005). Rothenberger (2008) view leader as person who must be able to develop the talents of others and should play a pivotal role of motivating other people to do the right things effectively.

The above articulations can thus be hypothesised as follows: which factors influence the performance of managers positively or negatively in executing their duties.

## **RESEARCH DESIGN AND METHODOLOGY**

### **Research approach**

The study followed an inductive approach. This approach relies on the use of qualitative data collection methods with the view of gaining a deeper understanding of the factors and nature of the problem under investigation. Inductive approach involve going from the specific to general. Silverman (2004) argues that the researcher will start with question, collect data, analyse the data collected. From this point the researcher start to formulate themes, go through the field notes to make sense. Primary data were collected through focus group with 8 managers in the leadership and management commission of the broader workshop. According to Gibbs (1997) focus group refers to an organised discussion with a selected group of individuals to gain information about their views and experiences of a topic under discussion. The rationale for choosing focus group is that it is able to draw upon respondents' attitudes, beliefs experiences and reactions in a way in which, would not be feasible using other methodologies such as observation. The other reason for choosing focus group as a data collection technique was made on the grounds that individually based interviews are flawed by a focus on individuals as social atoms independent from social context (Denzin & Lincoln, 2011:p.555). Arguably, focus group is invaluable due to the fact that it provides insights into how meaning gets constructed. This phenomenon enables the researcher to discover how interpretations were collectively constructed through discussion and interchange of ideas between participants in the group in particular where there are power differences between participants and decision-makers or even trade unions. The population of the study consisted of the managers who attended the workshop and they were categorised into different commissions or groups. The researcher with expertise and a former leader in the District was allocated leadership and management commission or group.

### **Ethical consideration**

In ensuring that ethical issues were adhered to, the researcher requested permission from the District Manager to use the workshop twofold, present a session on leadership and management as well as collecting data for research purpose. In the quest of proceeding with the data collection, permission was obtained from the participants by means of informed consent. Furthermore, participants were informed of their rights that if they feel uncomfortable continuing with the focus group, they may withdraw at any given time. They were further informed that participation was voluntary. The participants were assured of their anonymity because no personal identifiers were use in the focus group.

### **Data collection procedure**

Prior to data collection procedure, the researcher presented on leadership and management effectiveness to the participants in the leadership and management group. Based on the presentation, the participants were given an opportunity to reflect on their experiences as well as challenges that they encounter in managing their respective units in the Nkangala district. Based on the articulations from the participants, the researcher asked follow-up questions in attempt to explore particular aspects in more detail. Data collection lasted for a period of three days.

### **Trustworthiness**

In this paper, trustworthiness was achieved by prolonged engagement, taking into account distortion that might occur in the data and this was done to build trust (Lincoln & Guba, 1985). In ensuring that credible data were collected, triangulation, peer debriefing, and an independent coder were also used (Creswell, 2009).

## Data analysis

The researcher and the independent coder analysed data independently using Tech's data reduction technique of open-coding. According to Creswell (2009) Tech's data reduction method refers to a manual analysis done following eight steps as identified by Tech (1990). This technique is appropriate where the researcher intends to identify commonalities in the findings. The audio taped interviews were transcribed verbatim by the researcher. Audiotapes were listened to once and then listened to a second time. The field notes were then read to understand the data properly and to get a sense of the whole. Topics were abbreviated as codes and these were then written next to the appropriate clusters of the text. The related topics were grouped to reduce sub-themes to a manageable yet viable number. A final decision regarding the wording for *topics* was undertaken to turn these into categories (Creswell, 2009). After the data were completed, the researchers and co-coders met to discuss the analysis and consensus was reached on the specific significant emerging themes.

## DISCUSSION

As previously indicated that data collected were analysed using Tech's data reduction technique by following eight steps as suggested by Tech (1990), namely; (i) get a sense of the whole by reading all transcripts. (ii) picking one interview and go through it without making sense out of it. (iii) when all the interviews have completed, making a list of themes. (iv) take the list and go back to the data and abbreviates codes. (v) find the most wording for the topics as codes. (vi) make final decision on the abbreviated codes. (vii) assemble each data belonging to each category in one place. (viii) in the final step, if necessary, recode the existing data.

In the discussion of the result of the study, the format of the discussion is based on the themes that emerged from the analysis. The following themes emerged: improved legislation; human resource development; health infrastructure; lack of decision making; lack of trust and acceptance by followers as well as lack of management skills. In the next section, a discussion will be made on the themes as stipulated below.

### Improved legislation

It emerged that since the introduction of the District health system, there are strides made in the promulgation of legislation which enables the managers in the District to function within certain parameters. Legislations are imperative because they help the managers to guide the actions of the workforce to the right direction. What is important for the managers is to interpret the legislation correctly so that when they address the workforce about such legislations are versed with their provisions. As a result of improved legislation the District has created a milieu which is conducive for the managers to work in.

### Human resource development

The participants indicated that they have made a progress in identifying personnel within the sub-districts to take part in the developmental interventions. Most of the identified personnel are mostly in the nursing category. The rationale for this skewed selection is due to the fact the goal is have the majority nursing personnel as professional nurses. Furthermore, it emerged that the other category which is under development is administrative staff. Notably, most of the staff members possess matric as the highest educational level. Collaborations were entered into with institutions of higher learning to initiate programmes that will assist in fast-tracking the acquisition of post-matric qualification in particular the administrative personnel. A tremendous progress has been made in this regard.

### Health infrastructure

The other factor that stood in the discussion is the revamping of the health infrastructures. Most of the hospitals and clinics were renovated in order to put them in an acceptable state. It was further indicated that these public facilities are required to be in a good state because they are used by the majority of the community and health for all is declared as a priority by the government.

### **Lack of decision making**

The participants were very open on this theme and they indicated that whenever they make decisions they are challenged by unions in defense of their membership and as such they do not enforce decision as expected. This situation is a problem in the sense that at the end, the managers will end up not taking executive decisions fearing victimisation by strong-hold unions. Quite often the managers would always refer their decisions making to the higher authority which is contrary to the fact that as managers they are entrusted to make decisions. This however, could be as a result lack of competencies to make decisions.

### **Lack of trust and acceptance by followers**

An important finding in relation to trust and acceptance also emerged. In this regard, the participants believe that managers do not serve as role models to their fellow workers. This finding is contrary to what Mokgolo et al (2012) posited that managers or leaders are a source of inspiration and role models for employees and this however create leadership acceptance and trust by the followers. In this regard, leadership acceptance is the extent to which followers have a positive attitude towards their leaders and as such there could be lesser conflicts with managers. Contrary to this notion, resistance to managers or leaders could result in an unproductive behaviour that range from reduced productivity to sabotage.

### **Lack of management skills**

It emerged that management skills are imperative for all managers or leaders at all levels. These skills range from communication, delegation, decision- making, leadership to mention just a few. All these skills are essential for effective management and self-efficacy. Lack of these skills is tantamount to incompetency towards the manager or leader. The most crucial one is leadership, since it involves efficient organisation of resources in achieving purpose of the organisation. It is commonly about leading people and guiding them towards the achievement of the common goal. Without this skill, the managers are likely to fail in their respective levels of responsibilities.

## **RESEARCH LIMITATIONS**

The research was limited to one district and the other two health districts in Mpumalanga were excluded from the research. Future research should include other districts to enable determination regarding commonalities in the responses and to allow generalisability of the results.

## **PRACTICAL IMPLICATIONS**

The findings provide valuable insight on how the district is managed and the challenges associated with provision of effective leadership and management. Very important, recommendations made in this paper could be of beneficial to other districts in improving their managerial practices.

## **CONCLUSION**

The study intended to identified factor that impede managers to manage the district successfully. From the empirical evidence, it can be concluded that indeed there are realities identified characterised by (i) lack of decision-making by managers, this however is a concern since managers should make and enforce decision at all levels. It can be deduced that some of the managers lack decision-making skills which could make their lives very difficult in their respective positions. To improve this dilemma of management, it is important to reduce uncertainty and use real assumptions and theories relevant for decision-making. (ii) it can further be concluded that followers do not trust the instinct of their managers and it is therefore recommended that managers should always do what it is right and encourage a spirit of transparency in their activities. (iii) it emerged that the participants indicated that there is lack of management skills among themselves. It could therefore be deduced that there is a need to build capacity among them and lack of intervention in this regard, could result in some of

the managers being unable to lead or even make decisions. (iv) it is noteworthy that the managers are very happy in the improvement of legislation guiding practices in the public sector. Furthermore, they indicated that it was pleasing in the manner in which health infrastructure has been progressing through renovation of some of the hospitals and clinics. Finally, good managers need to adhere to management principles and demonstrate basic management skills and having these would increase self-efficacy to take a stance as managers.

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# **INTRODUCTION TO A NEW SCIENTIFIC DISCIPLINE: MANAGEMENT OF ALLSELVES' ENLIGHTENMENT AND EMPOWERMENT(MOSEE)**

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## **ABSTRACT**

*Corporate management theories based on modern knowledge management and practices have the clear limitations, if not impossible, in solving the critical issues of humanity deprivation in the modern society, overlooking life values, environment destruction, endless life and death survival business practices without continuous efforts for pursuing the cooperative common goods and developing the spirit culture for global business, technology and continuously sustainable prosperity for mankind and all living creatures in the globe. I would like now to create and show clearly an alternative academic field and ways and means to recover the genuine humanity and spirit management and thus to solve problems people and organizations encounter in routine lives. The new academic field and concepts, definitions, philosophy, theories and methodologies that I would like to introduce is the Management Of allSelves' Enlightenment and Empowerment.*

**Keywords:** Being Management Enlightenment Empowerment Humanity Spirit Asset Common Goods

## **INTRODUCTION**

### **Concepts of a New Academic Area: Management Of allSelves' Enlightenment and Empowerment**

The concept of the Management of allSelves' Enlightenment and Empowerment (henceforth MOSEE) refers to enlightenment and empowerment of human spirits or consciousness. That is to say, it transforms people who are the major entities of corporation management, while the transformation change people to have the really built-in freedoms, and therefore inspired human relationships in joyful ways with family members, other people, jobs, money, capitalism systems involved. While individuals are transformed, MOSEE also transforms the organizations and communities, such as families, corporations, societal organizations, one's own and other countries, world societies, globe natures and the universe. MOSEE has developing powerfully workable ways and means that are applicable to people and organizations, by which everybody and every organization enlighten and empower with each other and transform all collectively. MOSEE is a consolidated and integrated concept of Korean traditional philosophies and oriental enlightenment by utilizing western management science analytical methodologies.

### **Definition of Enlightenment**

The enlightenment in MOSEE means that people realize that human beings are the origin being so that the being is a part of the whole and all, and at the same time, the whole and all selves are not separated from the whole at all. We can understand easily the hologram concept. People create their own Being and are able to manage the reality with concentration of the management of the Being in the freedom and the value involved. Otherwise, people tend to just do lots without their own Being attached to the survival business games in order to take the

ownership and gain the profits included, which I call the management for Possession, not the management for concentration of Being.

## Background on MOSEE

The current capitalistic crisis is resulted in a management style which bases on the spirit of Western capitalism that defines human beings as ‘rational-economic man’. According to an in-depth analysis of the term ‘rational-economic man’, ‘rational decision-making’ is the first priority rather than ‘human-centered value orientation’ in its own meaning. The term ‘human-centered value orientation’ is firstly to live as a member of a humanist community. In this community, people orient a way of life that they give and take human dignity and love each other and receive a particular education in order to achieve a high level of spirit which plays a primary role in maintaining its society. If people get such the education, they pursue the goodness in possession, and if so, they will not only orient a value of ‘relative wealth’ rather than ‘absolute wealth’, but also live better than before due to infinite potential by realizing own Beings ourselves.

The term ‘rational’ implies meaning that reason is a core factor in making a decision. From a linguistic point of view, the word ‘decide’ is divided two segments: one is a prefix ‘de-’ which means ‘not’, other is an ending ‘-cide’ which means ‘kill’. In this respect, the word ‘decide’ means ‘not kill’. It namely means that reason excludes almost possible alternatives within decision-making process, so the word ‘decide’ is to select a remaining alternative. Thus, if situation change frequently, reasons will also be changed frequently so we will lose a right direction and in the end we will make a wrong decision. Therefore, problems in the business world occur from those cases that seem to be a vicious circle.

## The Nature of MOSEE

MOSEE starts at the point that cognizes exactly the gap between a sense of shared value and reality in order to create a new opportunity in the business world. It is hence highly important to understand the gap between sharing the value of both myself and community and distinguishing between reality and unreality in the awareness of reality. If we realize a reason of that the relation between failure and success is the same one between heads and tails, the gap is recognized not a problem, but a new opportunity for a creative challenge. This is the management of Being that realizes the importance of values of every time and of the nature of MOSEE.

## Expectations of MOSEE

A study of modern Knowledge Management cannot utilize human spirit as management resource, whereas a study of MOSEE is possible. It is precisely because MOSEE is a five-dimensional business model. If we assume human spirit as the fifth economic resource followed by land, human resources (or labor), capital and technology, we can overturn a current orthodoxy in the field of both economic and management. A study of MOSEE, in this respect, suggests ‘Enlarging law of Output with regard to Input’ instead of ‘Diminishing law of Output with regard to Input’.

## THE PHILOSOPHICAL BACKGROUND OF MOSEE

MOSEE originates in philosophical discourses like thus: Jae-Yoon Rhee’s ‘Life Source Opening and Living’ (生命本開活, *saeng myong bon gae hwal*), Korean Traditional Philosophy (韓哲學, *han chul hak*), Ha-Gon Rhee’s Spirit Philosophy (識, *sik*), and Dea-Yoon Sim’s Benefit Philosophy (利, *Li*).

## The Concept of Life Source Opening and Living (Author Jaeyoon Rhee’s Philosophy)

- 1) Life (生命, *sang myoung*): Life is thus breathing that is inherent in about 64 trillion human cells.



- 2) Bon (本, *bon*): Human being life is a part of the universe living and at the same time the whole of the universe living. Thus, individual human being is not separate from all others. It is not separate from whole others according to holism theory of quantum physics. Accordingly, myself of 'oneness' in the high spiritual level is important.
- 3) Openness and Interaction (開, *gae*): Openness and interaction within human body at the same time by breathing.
- 4) Living (活, *hwal*): Living is thus the management of myself and the community where I am. MOSEE is therefore the management of own Being that persistently oriented a true and permanent Being (i.e. light, sound, water, love, mercy, freedom, peace, joyful) without any conditions.

#### **Comparison between Management of Reality and Unreality**

Reality	Unreality
Being	Identity
Management 'Reality'	Management 'Unreality'

### **Dam-Hun HaGon Rhee's Spirit Philosoph**

Dam-Hun HaGon Rhee(lived during a.d. 1677-1724), Korean traditional great philosopher and president of the national library that was established A..D. 1699 by himself. This was the first library in Korean history that was the new beginning of well organized Information Science Management. His philosophy was Common People Centered based on True virtue and True Word. His ideology was Democracy which was remarkable at that time when the old ideology such as Government Officials were highly respected while Civilian Common People were Looked Down Upon.

### **Back-Un DaeYoun Sim's Benefit Philosophy**

Baek-Un DaeYoun Shim(lived during a.d.1806-1872), Korean traditional great philosopher and the president of a manufacturing company. His ideology was Benefit for all people in the world Comes First Philosophy rather than ethics. Accordingly he was great venture business man. He actualized his philosophy. He made the historical roll model that his early stage private Benefit seeking was upgraded to Commonly shared Benefit and upgraded again to people's Well Being in the world based on the great love of Human Being and all living Creatures and Environment related. That is why his philosophy is called Three Upgrading Stage Benefits Theory in the world.

### **Anatomy of Being Theory (Author Jaeyoon Rhee's Theory)**

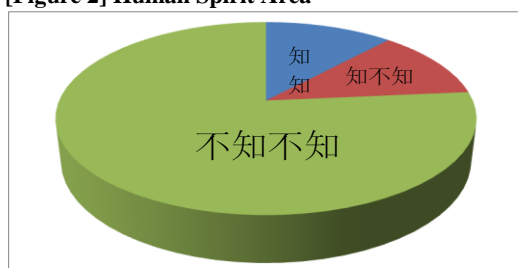
Five different Selves of a man and family, business organization, societal community.

- 1) Already Always Conditioned Self
- 2) Automatically Reacting Self like Bio Robot
- 3) Mind Wave Self
- 4) Original Self
- 5) Self Created Roles of Being

### **Research Area of MOSEE in Human Spirit**

Human spirit area is consisted of three sectors: firstly, Knowledge Management occupies (1) 3% of the area that 'I know what I know (知知, *zizi*), then Wisdom Management occupies (2) 27% of the area that 'I know what I don't know (知不知, *zibu*), and lastly the rest of them occupies (3) 70% of the area that 'I don't know what I don't know what I don't know'. The rest sector is the research field of MOSEE.

[Figure 2] Human Spirit Area



## The Comparison between Knowledge Management and MOSEE(Author Jaeyoon Rhee's Theory)

Knowledge Management and Wisdom Management view four factors of production (i.e. land, human resources, capital, and technology) as outer-capacity resource. This outer-capacity resource is a primary criterion in business performance evaluation. In the case of MOSEE, human spirit is recognized the fifth factor of production followed by four one, and is viewed inner-capacity resource. For this reason, MOSEE is to integrate both inner- and outer-capacity resource so that MOSEE pursues total consolidation ability.

Knowledge management	MOSEE
<ul style="list-style-type: none"> <li>· Possession Management</li> <li>· Material and Circumstances dominate Me</li> <li>· Starting by Desire ends up with Satisfaction</li> <li>· Enjoy Only Success of competition in Survival Business Game</li> </ul>	<ul style="list-style-type: none"> <li>· Being Management</li> <li>· New Being and Objectives Created by Me Create and Dominate Material and Circumstance</li> <li>· Being Management creates Breakthrough and uses Breakdown as New Opportunity as Happy Being by Itself</li> </ul>
<ul style="list-style-type: none"> <li>· Gap between Objectives and Present Situation=Breakdown →Problem Definition →Solution →Bigger Problem →Other Solution →Vicious Cycles Continue Over Again</li> </ul>	<ul style="list-style-type: none"> <li>· Gap between Objectives and Present Situation = New Opportunity</li> <li>· Gap=Gap Itself</li> <li>· Breakthrough and Breakdown are Face and Back of Same Coin</li> <li>· Strong Structure for Productive Performance</li> </ul>
<ul style="list-style-type: none"> <li>· Pursues Answer for Question But there can be No Answer for Question in Reality. Then why Pursue Definite Answer? Because Knowledge Management can avoid Responsibility and feel easy</li> </ul>	<ul style="list-style-type: none"> <li>· Inquiring Continuously</li> <li>· Spirit Quality Assurance Need</li> </ul>

## Paradigm Shift : From 20c Particle Civilization to 21c Wave Civilization

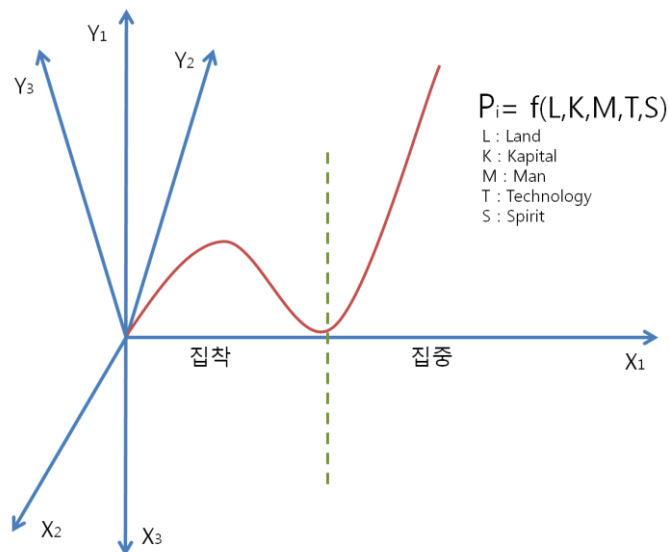
Comparison of two laws: diminishing law of resources due to the management for Possession based on attachment to the survival business games, and enlarging law of resources due to the management for concentration of own Being. Management for possession may lose the future of people, since past experiences affect present's decision-making which controls future. Only if commitment to future creates being for present, future comes here around present

Table 1. Comparison of Law for Management for Possession and Law for Management for Being (Author Jaeyoon Rhee's Theory)

Diminishing law due to Management for Possession	Enlarging law due to Management for Life path to enlightenment
Being Surviving life.	Life for enlightenment

Management for possession	Management for Being
CHRONOS(Man-made time)	KAIROS(Universe time)
No Being(Identity) Unreality	Real Being reality
Religion: God for myself only	Religion: God for All people
Survival Adaptation living no freedom	Open minded Give in most valuable things
Reactive Self Reaction to circumstances Ego(various conditions required)	Restoring process for integrity Authenticity Source of influence to get job done Creating new Being make new environment and circumstances
Reactive Human is Bio Robot equipped with basic software	Real Being Freedom Space Create new boundless realm of possibilities
I am separate unit on my own	I am a part of whole and all and whole and all itself
Continuous changes something from something	Create something new from nothing that is everything
Past→ Present→ Future	Past Present ← Future

Comparison of two curves: Diminishing Law Curve of Output Performance due to the management for Attachment(집착 in Korean) of Possession and Enlarging Law Curve of Output Performance due to the management for Concentration(집중 in Korean) of Being. (Author Jaeyoon Rhee's Theory )



## The Study on Spirit Resource

### Hylozoism

Hylozoism means that all materials have life in themselves. The word, Hylozoism, is the combined word of two words in Greek; one is 'hle' meaning 'materials' and the other is 'zoe' meaning life.

Spirit creates All things including Material (일체유심조一切唯心造)

Ancient oriental philosophers said the spirit and mind create the materials. The quantum physics developed in western world has also proved theory that subatomic, quantum, electronic, all of which compose the atom are not fixed being of materials but being of various potential possibility. They are particle materials while a person watches them. Otherwise they are just energy waves. It means that the object being of material can be changed by the subjective view point of the watching person. We can arrive the conclusion that man's spirit and mind can create the character of material and create the material.

## **MOSEE HAS DEVELOPED RESEARCH METHODOLOGIES ON HUMAN SPIRIT CAPACITY AND HUMAN BEING AND HUMAN COMMUNITIES INCLUDING BUSINESS CORPORATIONS.**

Every human being has the built-in system of scientifically accurate knowledge within oneself without realizing. The reason why every human can not realize is every human is stocked in the vicious circles of biases made by human historical habits, educations and what he or she has interpreted the experiences in his or her lives. MOSEE has developed one hundreds(100) distinction methodologies and tools to be used for the training participants to enlighten and empower by himself or herself.

- 1) Factual phenomena and interpretations of human and society
- 2) Sensory perception
- 3) Higher sensory perception
- 4) Extra sensory perception
- 5) Applied kinesiology
- 6) Korea traditional spirit training methodologies
- 7) MOSEE simply modified meditation and yoga

### **Creative language system of man will create every success of life and businesses related**

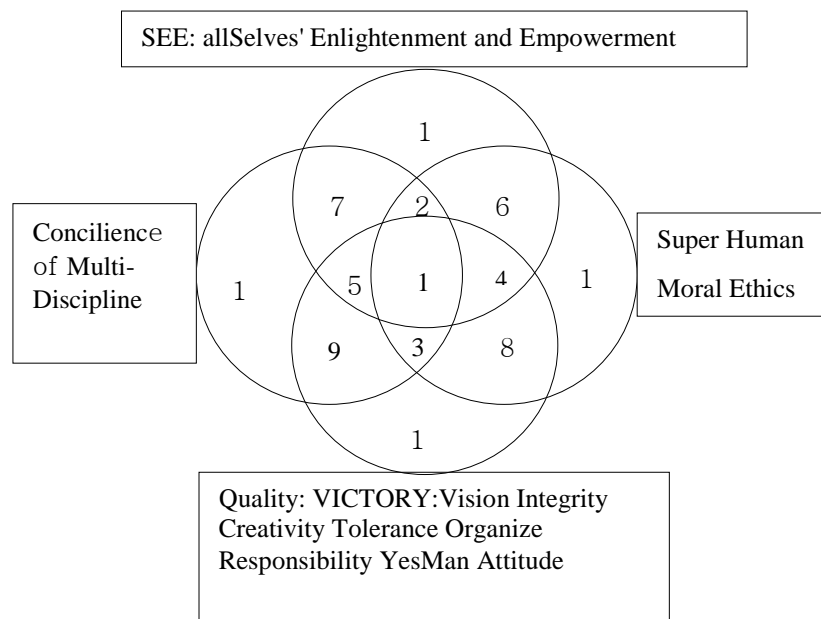
Declaration of declaration will create the creation. A person's path to enlightenment and empowerment goes with the creative language pattern. The words create the world and the circumstances related. However, when the words would only describe the world and circumstances there should be the innovation only without success of creation of something from nothing.

Creative Language Dimension System Table( Author Jaeyoon Rhee's Theory)

Dimension	2nd	3rd	4th	5th
Language Type	Ordinary	Pretend	Innovative	Creative
Intent of communication	Automatic Responsive based On Past Memories	Intentionally Misleading and Inauthentic	Honest on Facts Explain to Fit World Circumstances	MOSEE Creative Daily Living to Create New World Circumstances

Language Function for Way of Thinking	Depend on Experiences Memories Many Unrealistic Unsystematic Thoughts Noises. Habitual Listening And Telling. Unreal Vicious Cycle of Interpretation	Intentionally Offensive and/or Self Protective Plotting, Two Extremes Separate; I am Right You are Wrong, Dominate Avoid Responsibility.	Words to Fit World and Circumstances Possession Management with Attachment Innovative to Change a Little Better and More, Difference, Based On Past Way Of Thinking and Doing Experiences, Influences	Words to Create New World and Circumstances. Be Present with Awareness. Being Management with Concentration. Transformation by Self as Others with New View Point in New Realm of Possibility
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### Leadership Type 13 of MOSEE (Author Jaeyoon Rhee's theory)

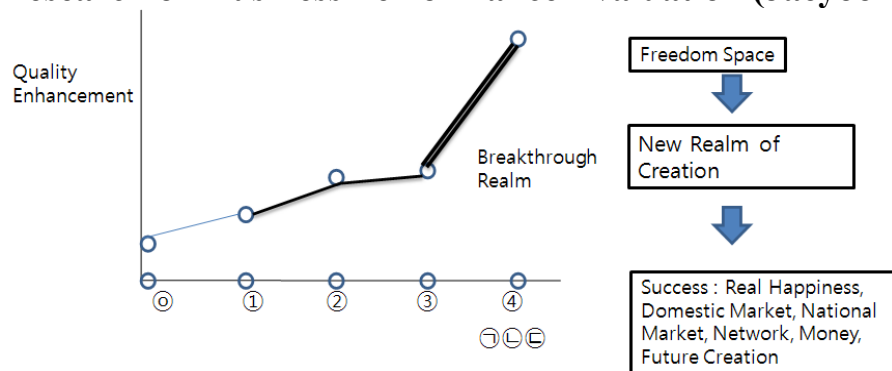


### Methodologies, techniques and one hundred(100) tools

MOSEE has the specially designed methodologies, techniques and one hundred(100) tools to be utilized in order to enlighten and empower people and communities and all kinds of organizations.; group participation and sharing is one of these methodologies.

**MOSEE'S PRACTICE AND METHODOLOGIES FOR  
MANAGEMENT OF CREATION (MOC) THE MOC IS  
BASICALLY THE MANAGEMENT TO CREATE  
SOMETHING  
FROM NOTHING**

## Research on Business Performance Evaluation (Jaeyoon Rhee's theory)



(Figure) Breakthrough Performance of the Firm with High Level MOSEE

## MOSEE for Management Of Creation developed managerial Principles for the Human Spirit resources and assets

- 1) Performance Effects come from Myself and our corporation
- 2) Myself and our corporation must get along with the real world
- 3) Myself and our corporation begin and complete now and here
- 4) Myself and our corporation depict the picture of the objective success result before start
- 5) The big gaps are the new opportunities for success
- 6) The breakdowns are not the problems but the good opportunities
- 7) The management actions for Human, of Human, by Human result in prosperity
- 8) From the high to the low down
- 9) The ideas, visions, principles, objectives, strategies, ways, means, executions evaluations are to go to the world from ourselves
- 10) Human management principles are influenced definitely by the universe management principles
- 11) Organization and individual behavior start from myself to all people around
- 12) Financial management handles the circumstances of outside first and that of inside later'
- 13) Marketing strategic management are to come from all outside to myself.
- 14) Real being are to manage switch system from possession centered principle  
Into Being oriented principle
- 15) Belief managements: there are 4 different types of beliefs
- 16) Resent managements
- 17) Awakening man hides unconsciously the fear originated
- 18) Declaration of one's own Being that one creates
- 19) Awakening that human being has tendency to fall in his or her identity programmed by others and/ or influenced by the circumstances instead of standing for his or her own being created by himself or herself
- 20) Actions systematically followed by intended object, plan, schedule and developing human relations on the firm principles of authenticity and integrity involved
- 21) Integration of one's own life and asking why I am doing these things now
- 22) Process to inquire 12 steps in order to discover one's own Being
- 23) Acquiring one's own wealth and freedom and happiness
- 24) Training systematically how to develop productivity for oneself and organization related
- 25) Develop the good culture for the organization
- 26) Integration of all aspects of one's lives such as personal life, family life, occupation life, societal life, national life and global life
- 27) Training 25 steps of inquiring what I would do assuming today is the last day in my living
- 28) Training systematic steps for the inspiring leadership development
- 29) True creation of something from nothing
- 30) Trans spirit connected cooperation and technology connected cooperation
- 31) Transform present situation of signalized Human into Real Being of Human  
That is Human Rebirth

32) Globe government network building for globe life and peace

## **Application Areas of MOSEE**

- 1) Breakthrough Management to Transform People and Organizations from Their Identity Stocked in Vicious Cycle of Fixed Way of Thinking up to New Real Being with Freedom Spaces and Creative Thinking
- 2) Transform Strategic Intention Management with Attachment to Possession Up to Pure Intention Management with Concentration to Being Created in Freedom Spaces
- 3) Create and Manage Freedom Spaces
- 4) Transform Human Being from Resources up to Management Governor
- 5) Create Real Something from Nothing and Everything Potentiality
- 6) Creative capitalism and creating shared value management
- 7) Coexistence value management in global market
- 8) Accounting and financial management by spirit resource and spirit asset valuation
- 9) Human resource management and leadership development
- 10) Organization management by extra cooperation and freedom
- 11) Future oriented marketing by customer participation for customer
- 12) Social responsibility and business ethics
- 13) Management by human flavor and intimacy
- 14) Regional and national comprehensive management strategies by specifications
- 15) Harmony and interaction management of global living environment
- 16) 21<sup>st</sup> century new trends management
- 17) Management of selling corporations and going out of markets related
- 18) Management of high level trans spirit cooperation and high level trans technology cooperation in globe basis
- 19) 16<sup>th</sup> century Renaissance and creation management
- 20) Korean ancient philosophy 'Hong- Ik In-Gan' in Korean that means to make Benefit for all Human Beings and living creatures in the world

## **CONCLUSION**

Individuals and corporations may create highly qualified human spirit through the aid of MOSEE, which may produce a new world or relationships among people. Knowledge management and informative education, along with lands, capitals, human resources, and technology and development skills, as the determinants for the management performance, define outer generated capacity in the four dimensions . MOSEE adds human conciseness in the five dimensions as inside generated capacity, which results in integrated capacity which combines outside and inside generated capacity. The integrated capacity renders integrity and completeness of authentic creation.

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# **CREATIVE ECONOMY AND MANAGEMENT OF ALLSELVES' ENLIGHTENMENT AND EMPOWERMENT(MOSEE)**

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## **ABSTRACT**

*In this paper we want to study the relation of Creative Economy and Management of allSelves' Enlightenment and Empowerment (here after MOSEE). Nowadays the Korean government pursues Creative Economy. The essence of the methodologies the Creative Economy is mainly the 3<sup>rd</sup> dimensional Knowledge Management. But with this approach, Creative Economy cannot be successfully accomplished. So we would like to suggest new creative methodology of Management of allSelves' Enlightenment and Empowerment(MOSEE). This methodology is 5<sup>th</sup> dimensional approach to create and show clearly an alternative academic field and ways to recover the genuine humanity and thus to solve the problems people encounter in routine lives.*

*Keywords:* Creative Economy, MOSEE, allSelves', Enlightenment, Empowerment

## **INTRODUCTION**

Nowadays Korean government pursues the 'Creative Economy', in which Creativity is most important. As UNCTAD Mentions, the 'Creative Economy' is an evolving concept based on creative assets potentially generating economic growth and development. Creative Economy can foster income generation and export earnings while promoting social inclusion, cultural diversity and human development. It embraces economic, cultural and social aspects interacting with technology, intellectual property and tourism objectives. It is a set of knowledge-based economic activities with a development dimension and cross-cutting linkage at macro and micro levels to the overall economy. It is a feasible development option calling for innovative, multi-disciplinary policy responses and inter ministerial action. For the Creative Economy it is necessary to cultivate creative industries and creative management. Creative Economy is about the relationship between creative and economics. Creative is not new and neither is economics, but what is new is the nature and extent of the relationship between them and how they can be combined to create value and wealth. . For the Creative Economy creative mind and cooperative process/research are very critical. Current main methodology to accomplish Creative Economy is Knowledge Management which is 3<sup>rd</sup> dimensional approach focused on existing human nature. But with this approach, Creative Economy cannot be successfully accomplished. So we would like to suggest new creative methodology of Management of allSelves' Enlightenment and Empowerment (henceforth MOSEE).

The concept of the Management of allSelves' Enlightenment and Empowerment (MOSEE) refers to enlightenment and empowerment of human spirits or consciousness. That is to say, it transforms people who are the major entities of management, while the transformation changes people to have the really built-in freedoms, and therefore inspired human relationships in joyful ways with family members, other people, jobs, money,

capitalism systems involved. While individuals are transformed, MOSEE also transforms the organizations and communities, such as families, corporations, societal organizations, one's own and other countries, world societies, globe natures and the universe. MOSEE has developing powerfully workable ways and means that are applicable to people and organizations, by which everybody and every organization enlighten and empower with each other and transform all collectively. MOSEE is a consolidated and integrated concept of Korean traditional philosophies and oriental enlightenment by utilizing western management science and analytical methodologies. The current capitalistic crisis is resulted in a management style which bases on the spirit of Western capitalism that defines human beings as 'rational-economic man'. According to an in-depth analysis of the term 'rational-economic man', 'rational decision-making' is the first priority rather than 'human-centered value orientation' in its own meaning. The term 'human-centered value orientation' is firstly to live as a member of a humanist community. In this community, people orient a way of life that they give and take human dignity and love each other and receive a particular education in order to achieve a high level of spirit which plays a primary role in maintaining its society. If people get such the education, they pursue the goodness in possession, and if so, they will not only orient a value of 'relative wealth' rather than 'absolute wealth', but also live better than before due to infinite potential by realizing own beings.

The term 'rational' implies meaning that reason is a core factor in making a decision. From a linguistic point of view, the word 'decide' is divided two segments: one is a prefix 'de-' which means 'not', other is an ending '-cide' which means 'kill'. In this respect, the word 'decide' means 'not kill'. It namely means that reason excludes almost possible alternatives within decision-making process, so the word 'decide' is to select a remaining alternative. Thus, if situation change frequently, reasons will also be changed frequently so we will lose a right direction and in the end we will make a wrong decision. Therefore, problems in the business world occur from those cases that seem to be a vicious circle.

MOSEE starts at the point that cognizes exactly the gap between a sense of shared value and reality in order to create a new opportunity in the business world. It is hence highly important to understand the gap between sharing the value of both myself and community and distinguishing between reality and unreality in the awareness of reality. If we realize a reason of that the relation between failure and success is the same one between heads and tails, the gap is recognized not a problem, but a new opportunity for a creative challenge. This is the management of being that realizes the importance of values of every time and also the nature of MOSEE.

## **CONCEPT OF CREATIVE ECONOMY AND CREATIVE ECONOMY IN KOREA**

### **Concept of Creative Economy**

The basic essence of Creative Economy is the Creativity. Creativity is necessary to the advancement to science and technology and especially important to make new added value and job opportunity. In today's information economy, knowledge and creativity are fast becoming powerful engines driving economic growth. This will have profound implications for trade and development. For advanced industrial economies, the information economy is already a leading edge from which national wealth flows and a key to improving competitiveness. In broad terms, the quantity and quality of a country's "human capital" set the parameters for success. But creativity is increasingly being recognized as a key strategic asset driving economic growth as well as determining successful integration into a rapidly changing global economy.

While creativity is becoming an increasingly important input into the production process of all goods and services, there is a group of activities in which it is used intensively and with a particularly high degree of professional specificity. These activities are the so-called creative industries. Globally, creative industries are estimated to account for more than 7 percent of the world's gross domestic product (GDP) (World Bank 2003) and are forecast to grow on average by 10 per cent yearly (Price Waterhouse Coopers 2003). Already these industries represent a leading sector in the OECD economies, showing annual growth rates of 5 to 20 percent (EESC 2003).

Creative industries already contribute to employment generation and export expansion in some leading

developing countries, but at present their wider potential is unrealized. Indeed, they are too often associated with a precarious form of job security, with low value added and limited export earnings. As a result, there is an urgent need to modernize this sector and strengthen local capacities in order to boost their contribution to income generation and hence contribute to poverty reduction.

Ongoing research by the UNCTAD secretariat has emphasized the potential of these industries in developing countries. Creativity, more than labor and capital, or even traditional technologies, is deeply embedded in every country's cultural context. Excellence in artistic expression and abundance of talent, along with openness to new influences and experimentation, are not the privilege of rich countries. With effective nurturing, these sources of creativity can open up new opportunities for developing countries to increase their shares of world trade and to "leap-frog" into new areas of wealth creation.

Doing so will need to recognize the special nature of the creative economy: its intangible assets, licensing processes, entrepreneurial and management principles, forms of regulation and significant (in some cases total) reliance on intellectual property. This will require a more strategic kind of thinking from policy makers, both nationally and internationally, than is often associated with more traditional industrial policies. This in turn will require different kinds of data collection from those currently used.

The term "creative industries" is of relatively recent origin. While there are obvious connections to and continuities with cultural industries, such as the performing arts and handicrafts, the designation marks a historical shift in approach to potential commercial activities that until recently were regarded purely or predominantly in non-economic terms. Hawkins (2001) has classified creative industries into four broad subsectors where the copyright, patents, trademarks and design structure of the final product. However, a set of core industries or areas of activity constituting the "creative industries" can be identified as the recording industry; music and theatre production; the motion picture industry; music publishing; book, journal and newspaper publishing; the computer software industry; photography; commercial art; and the radio, television and cable broadcasting industries.

What seems clear is that the creative industries sector lies at the crossroads between the arts, business and technology. A strong, mutually reinforcing relationship exists between and among the different artistic and economically distinct activities that make up the cluster of creative industries, ranging from upstream activities, such as the traditional arts, performing arts, literature and visual arts, to "downstream" activities such as advertising, design, publishing and media-related activities. The latter "applied arts" are much closer to the market than the commercial application of traditional cultural activities. Downstream activities derive their commercial value from low reproduction costs and easy transfer to other economic domains. From this perspective, cultural industries make up a subset of the creative industries, while the even broader cluster of copyright industries consist of both creative industries and distribution-based industries.

Because the marriage of technological application and intellectual capital provides the main source of wealth in this sector, continuous learning and a high degree of experimentation are key to achieving sustained and cumulative growth. This mixture can produce very fast growth. The highest growth is in technology-centered industries such as software programming and video games; the lowest is in music and film. However, because these industries are all also associated with idiosyncratic products subject to unpredictable and changing tastes, their markets are associated with a high degree of uncertainty, and a good deal of effort goes into researching and shaping those tastes.

Because many creative industries are hits-based or style-based industries subject to shifts in taste and fashion and new technologies (applied to both production and distribution) pose a constant threat to existing activities, these tend to be high-risk industries. At the same time, this inherent dynamism is constantly opening new entry opportunities. As a result, creative industries tend to have some distinct institutional features

Creativity is not a given resource. However, unlike labor or capital, or even traditional technologies, it is a resource that is deeply embedded in a country's social and historical context. As such, it is a ubiquitous asset. This provides new opportunities for developing countries to develop new areas of wealth and employment creation consistent with wider trends in the global economy. However, the nurturing and effective harnessing of this asset may be just as challenging, if not more so, for policy makers. In the new global setting,

competitiveness is no longer defined only in cost terms but as the application of new technologies to knowledge-based activities that are capable of generating more added value. The key drivers are growing global demand for content services, falling technology prices and new patterns of consumption across the globe; together, these result in the growth of economic value and market power for such goods and services. Alongside the vast new opportunities that have been opened up by ongoing economic and political processes, there are also a number of corresponding challenges that need to be addressed by policy makers in developing countries aspiring to enter this highly lucrative segment of the global market. These challenges relate to the actual structure of the global media markets and to the nature and characteristics of the creative industries sector itself.

## Creative Economy in Korea

Raising Creative Economy as the new economic policy agenda, the Korean government released the Creative Economy Action Plan on June 5, 2013. Creative Economy in Korea was mainly prompted by the decreasing viability of its traditional “catch-up” strategy amid global economic crises and the rise of emerging economies. The Korean government also noted that the major source of values-added in the international economy is shifting to innovative technologies and creative ideas. Korea’s Creative Economy is a new economic strategy that creates new industries and markets as well as an enhancing existing industries by combining the imagination and creativity of Koreans with science and technology, thus creating qualitative jobs. This policy encompasses the whole economy, including followings:

- Agriculture and traditional industries (e.g., traditional open markets), manufacturing, infrastructure, culture contents industry, software, new internet industries (e.g., cloud computing, big data, etc.), security industry; and
- Other prospective industries, including, but not limited to: generic analysis and treatments, graphene technology, biomedical technology, nanotechnology, environmental technology, satellites and nuclear reactors, unmanned airplanes, etc.

Creative Economy Action Plan has three goals: (1) creating new jobs and markets through creativity and innovation; (2) strengthening Korea’s global leadership through a Creative Economy; (3) building a society where creativity is respected and made manifest. It has also proposed six strategies, as follows:

- (1) Properly compensating for creativity and building an environment that promotes the creation of startups
- (2) Strengthening the role of ventures and small-and medium-sized enterprises(SMEs) and boosting their ability to enter global markets
- (3) Developing growth engines to pioneer new markets and industries
- (4) Fostering global creative talent
- (5) Enhancing the innovation capacity of science, technology, and ICT
- (6) Promoting an environment in which the government and people work together to build a Creative Economy

## THE BASIC NATURE OF MOSEE

MOSEE originates in philosophical discourses like thus: Author Jaeyoon Rhee’s ‘Life Source Openness and Living’ (生命本開活, *Saeng Myong Bon Gae Hwal in Korean sound*), Korean Traditional Philosophy (韓哲學, *Han Chul Hak*), Ha Gon Rhee’s Spirit Philosophy (識, *Sik*), and Dea Yoon Shim’s Benefit Philosophy (利, *Li*).

Dam-Hun Ha Gon Rhee(lived during a.d. 1677-1724), Korean traditional great philosopher and president of the national library that was established A..D. 1699 by himself. This was the first library in Korean history that was the new beginning of well organized Information Science Management. His philosophy was Common People Centered based on True Virtue and True Word. His ideology was Democracy which was remarkable at that time when the old ideology that government officials were highly respected while civilian common People were looked down upon.

Baek-Un Dae Youn Shim(lived during a.d.1806-1872), Korean traditional great philosopher and the president of a manufacturing company. His ideology was that Benefit for all people in the world comes first rather than Ethics. Accordingly he was a great venture business man. He actualized his philosophy. He made the

historical role model that his early stage Private Benefit seeking was upgraded to Commonly Shared Benefit and upgraded again to People's Well Being in the world based on the great love of Human Being and all living Creatures and Environment related. That is why his philosophy is called Three Upgrading Stage Benefits Theory in the world.

MOSEE has developed research methodologies on human spirit capacity, human being and human communities including business corporations. Every human being has the built-in system of scientifically accurate knowledge within oneself without realizing. The reason why every human cannot realize is every human is stocked in the vicious circles of biases made by human historical habits, educations and what he or she has interpreted the experiences in his or her lives. MOSEE has developed one hundred(100) distinction methodologies and tools to be used for the training participants to enlighten and empower by himself or herself. Human spirit area is consisted of three sectors: firstly, Knowledge Management occupies 3% of the area that 'I know what I know (知知, zizi), then Wisdom Management occupies 27% of the area that 'I know what I don't know (知不知, zibuzi), and lastly the rest of them occupies 70% of the area that 'I don't know what I don't know what I don't know). The rest sector is the research field of MOSEE.

Knowledge Management and Wisdom Management view four factors of production (i.e. land, human resources, capital, and technology) as outer-capacity resource. This outer-capacity resource is a primary criterion in business performance evaluation. In the case of MOSEE, human spirit is recognized as the fifth factor of production followed by four one, and is viewed inner-capacity resource. For this reason, MOSEE is to integrate both inner-capacity and outer-capacity resources so that MOSEE pursues total consolidation ability

## **Anatomy of Being Theory (Author Jaeyoon Rhee's Theory)**

Five different Selves of human being and organization, i.e. family, business organization, societal community.

- 1) Already Always Conditioned Self
- 2) Automatically Reacting Self like Bio Robot
- 3) Mind Wave Self
- 4) Self Created Roles of Being
- 5) Original Self

## **Creative Language System of Human Being will Create Every Success of Life and Businesses related and Creative Economy/Management**

Declaration of declaration will create the creation. A person's path to enlightenment and empowerment goes with the creative language pattern. The words create the world and the circumstances related. However, when the words would only describe the world and circumstances there should be the innovation only without success of creation of something from nothing.

Creative Language Dimension System ( Author Jaeyoon Rhee's Theory)

Dimension	2nd	3rd	4th	5th
Language Type	Ordinary	Pretend	Innovative	Creative
Intent of communication	Automatic Responsive based On Past Memories	Intentionally Misleading and Inauthentic	Honest on Facts Explain to Fit World Circumstances	MOSEE Creative Daily Living to Create New World Circumstances

Language Function for Way of Thinking	Depend on Experiences Memories Many Unrealistic Unsystematic Thoughts Noises. Habitual Listening And Telling. Unreal Vicious Cycle of Interpretation	Intentionally Offensive and/or Self Protective Plotting, Two Extremes Separate; I am Right You are Wrong, Dominate Avoid Responsibility.	Words to Fit World and Circumstances Possession Management with Attachment Innovative to Change a Little Better and More, Difference, Based On Past Way Of Thinking and Doing Experiences, Influences	Words to Create New World and Circumstances. Be Present with Awareness. Being Management with Concentration. Transformation by Self as Others with New View Point in New Realm of Possibility
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## RELATION OF CREATIVE ECONOMY AND MOSEE

Creative Economy basically aims to create something from nothing and needs creative people. Creative people, who prefer diverse places, tolerant and open to new ideas, power regional economic growth. Creative people work for the love of a challenge. They crave the feeling of accomplishment that comes from cracking a riddle, be it technological, artistic, social, or logistical. They want to do good work. Though all people chafe under what they see as bureaucratic obstructionism, creative people actively hate it, viewing it not just as an impediment but as the enemy of good work. For Creative Economy, Creative Management is useful. Creative Management consists of new concepts, new ideas, new methods, new directions, and new mode of operation. Creative implies new managerial practices on the one hand and leadership to implement on the other. Traditional management decision-making are centered on efficiency and effectiveness. But Creative Management focuses on flexibility and adaptability to deal with the process of managing change. MOSEE can develop managerial principles to make Creative Management by developing the human spirit resources and assets. The basic principles of utilizing MOSEE to make Creative Management in an organization are as follows.

1. Performance of an organization comes from the reaction of I and an organization.
2. During this process I and organization must get along with the real world
3. I and organization begin and complete now and here.
4. I and organization depict the picture of the objective success result before start.
5. The big gaps are the new opportunities for success.
6. The breakdowns are not the problems but the good opportunities.
7. The management actions for Human, of Human, by Human result in prosperity from the high to the low down.
8. The ideas, visions, principles, objectives, strategies, ways, means, executions evaluations are to go to the world from ourselves.
9. Human management principles are influenced definitely by the universe management principles.
10. Organization and individual behavior start from I to all people around.
11. Financial management handles the circumstances of outside first and that of inside later.
12. Marketing strategic management is to come from all outside to myself.
13. Real being is to manage switch system from possession centered principle into being oriented principle
14. Belief managements: there are 4 different types of beliefs.
15. Resent managements.
16. Awakening man hides unconsciously the fear originated.
17. Declaration of one's own being that one creates.
18. Awakening that human being has tendency to fall in his or her identity programmed by others and or influenced by the circumstances instead of standing for his or her own being created by himself or herself.
19. Actions systematically followed by intended object, plan, schedule and developing human relations on the firm principles of authenticity and integrity involved.

20. Integration of one's own life and asking why I am doing these things now.
21. Process to inquire 12 steps in order to discover one's own being.
22. Acquiring one's own wealth and freedom and happiness.
23. Training systematically how to develop productivity for oneself and organization related.
24. Develop the good culture for the organization.
25. Integration of all aspects of one's lives such as personal life, family life, occupation life, societal life, national life and global life.
26. Training 25 steps of inquiring what I would do assuming today is the last day in my living.
27. Training systematic steps for the inspiring leadership development.
28. True creation of something from nothing.
29. Trans spirit connected cooperation and technology connected cooperation.
30. Transform present situation of signalized Human into Real Being of Human that is Human Rebirth
31. Globe government network building for globe life and peace.

In the process of Korean government's pursuing the 'Creative Economy', the Creativity and Creative Management is most important factors. For the Creative Economy it is necessary to cultivate creative industries and creative management. For the Creative Management creative mind and cooperative process/research are very critical. For this developing human spirit resources and assets by MOSEE will be most important, because as previously MOSEE can develop research methodologies on human spirit capacity, human being and human communities including business corporations. In the Creative Economy and Creative Management which are mentioned in Korean government knowledge management process and methodologies are thought to be the most important factors. But with knowledge management process and methodologies very creative idea and invention cannot be pursued. MOSEE can only do this because MOSEE is Being Management and creates Breakthrough and uses Breakdown as New Opportunity as Happy Being by Itself.

## CONCLUSION

Individuals and corporations may create highly qualified human spirit through the aid of MOSEE, which may produce a new world or relationships among people. Knowledge management and informative education, along with lands, capitals, human resources, and technology and development skills, as the determinants for the management performance, define outer generated capacity in the four dimensions. MOSEE adds human conciseness in the five dimensions as inside generated capacity, which results in integrated capacity which combines outside and inside generated capacity. The integrated capacity renders integrity and completeness of authentic creation. So MOSEE can develop Human Being to make Creative Management by the relation mechanism of MOSEE and Creative Management. The very creativity and Creative Management by MOSEE will be the most powerful engine for the Creative Economy which is being pursued by Korean government.

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# PRICE OF LAND AS DETERMINANT FOR SPATIAL LOCATION OF INTEGRATION SERVICE CLUSTERS

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## ABSTRACT

*The service sector is secondary in relation to the material production industries; integration clusters of enterprises in service sector are secondary in relation to the development of the sector itself. That is why a solution to the problem of spatial location of service sector businesses is to be based on the choice of a model for location of populated areas as places where service enterprises and companies are located. Integration clusters of service enterprises have two major forms of spatial localization: horizontal integration or vertical integration. At the regional level both types of integration clusters can appear.*

**Keywords:** Spatial location, Integration clusters

## INTRODUCTION

The service sector is secondary in relation to the material production industries; integration clusters of enterprises in service sector are secondary in relation to the development of the sector itself. That is why a solution to the problem of spatial location of service sector businesses is to be based on the choice of a model for location of populated areas as places where service enterprises and companies are located (Models of Laurie, Christaller, Lösch, Colb, Zipf). Table 1 shows brief evaluation of these models which was done by the author of the present research.

**Table 1: Evaluation of models for location of populated areas**

Model name	Author	Content
The urban multiplier	Laurie	It reveals how economic and geographic structure of a city depends on development features and specifics of basic and service sectors of economy
Central place model	W. Christaller	The ideal location of cities is possible only on isotrope surface with uniform density, purchasing power of the population, transportation service, etc.
Economic landscape	A. Lösch	Elaboration of W. Christaller's model through distinguishing the central place, the most important economic centre of a country
Model of right location of agglomerations	G. Colb	Optimum location of populated areas is characterized with unhomogeneous structure where a big city takes the central place, the demand cone determines localization of towns and villages are located close to towns being a periphery of supply
Rank-Size rule	Zipf	In an integral economic region, which has n cities, the population size of the city with rank n is $1/n$

Integration clusters of service enterprises have two major forms of spatial localization:

- horizontal integration, which appears as a result of integration contacts with service enterprises, increasing demand for services and demand multiplier effect;

- vertical integration, which appears due to development of chain forms of business organization in service sector.

At the regional level both types of integration clusters can appear. In order to research the factors that affect location of horizontal integration clusters it is reasonable to use the Laurie model. This model belongs to the class of ideal models for location of cities and can give recommendations on optimum distribution of geographic objects in homogeneous space. In a classic model homogeneousness has the following features: the same terrain (flatland), evenly distributed population, equal purchasing power among population, equal accessibility of transportation (Alimagomedova, 2009).

In the author's opinion, the Laurie model can be used for research at the regional level, since homogeneousness of the space, in this case, is defined by institutional features of a constituent entity of the Federation as a territorial socioeconomic system.

The status of constituent entities of the Russian Federation implies the following multitude of characteristics (Constitutional Law of Russia).

1. Constituent entities of the Federation are entitled to work out and pass their own constitutions or statutes. The real status of a constituent entity, however, is defined not only by its own bills, but also federal enactments.
2. Constituent entities of the Federation have a right to determine and establish their name.
3. Constituent entities of the Federation are entitled for self-administration. The institutions, exercising authority in their territories, are regional government bodies, which decide on directions for their socioeconomic development. In case there are objects of joint federal and regional control in the territory of a constituent entity, the regional government bodies exercise legal regulation and control together with federal state government bodies.
4. The territory of constituent entities forms a constituent part of the Russian Federation. Change of territories of constituent entities is only possible provided the consent of the constituent entities themselves has been obtained.
5. Constituent entities are entitled for legislative activity in accordance with the authority they have been granted.
6. Interests of constituent entities are represented at the federal level.
7. In constituent entities of the Federation functions their own system of all three branches of government.
8. Constituent entities are involved in independent international activity. International activity of constituent entities has limitations which are set by the Constitution of the Russian Federation, law of the Russian Federation and treaties made at the federal level.
9. Constituent entities have their own administrative centres.
10. Constituent entities do not have the right for secession (unilateral withdrawal from the Russian Federation).
11. Constituent entities have equal rights, but they are not equal. Since there are a lot of historical, economic, geographical and other differences, it cannot be said that there is actual equality of all constituent entities of the Federation.
12. Constituent entities of the Federation are non-sovereign state formation. The sovereign is the Russian Federation itself, whereas its component parts have a certain degree of independence in the spheres defined by the federal Constitution.

The Laurie model reviews four major structural elements of a city system: land, employment in the main sector of city economy, employment in the service sector and population. The main sector implies an aggregate of enterprises whose location in the city does not depend on behavior of other elements of the system, so the geographical distribution of employment in this sector is believed to be an exogenous value. All other enterprises are thought to belong to the service sector.

First, the model analyzes data about total surface of a city, presence of free land; land allocated for main sector enterprises; geographical distribution of employment in this sector; development characteristics of transport network. Then spatial structure of the populated area is defined. This, in its turn, affects the location of service enterprises inside the city. The latter factor results in changed spatial structure of overall employment, which makes it necessary to go through the whole cycle of calculations one more time. Evaluation by the Laurie model is done as soon as two neighbouring iterations get a steady structure of employment and, at the same time, limitations on the use of municipal land are not violated. Convergence of the procedure is not guaranteed.

Since the requirements for the level of detailed elaboration of initial information are rather high, the model is mainly meant for short-term and medium-term projections of urban development.

On the basis of the Laurie model, three big major sectors can be marked out in the economy of any region:

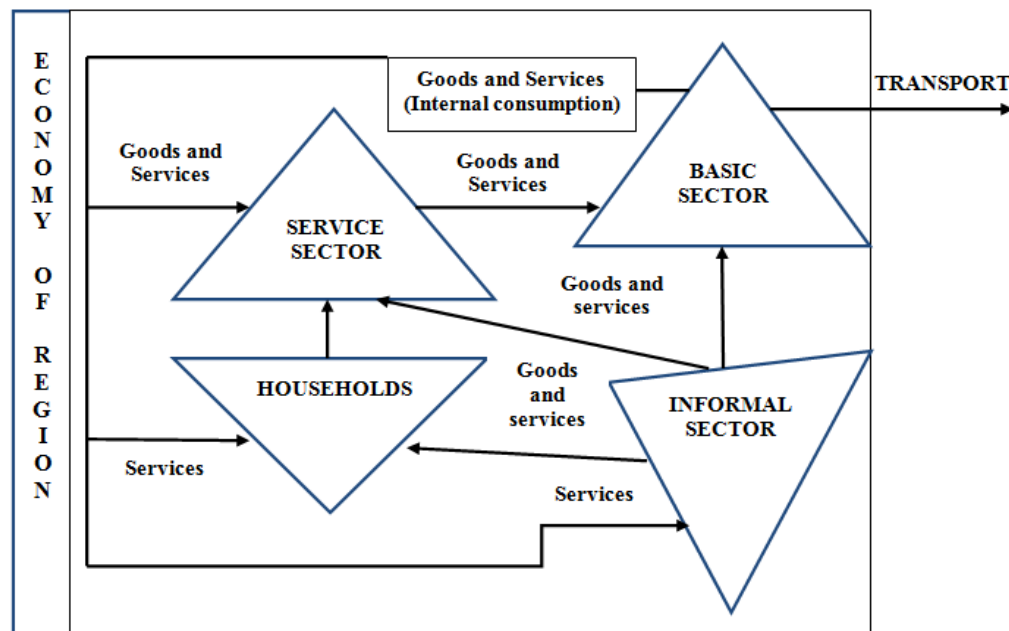
- basic sector;
- service sector, which includes service industry and secondary operations that provide for life-sustaining activity of the population;
- household sector where housewives, non-adults and pensioners belong.

In cities there is an increasing growth of the informal sector, where migrants arriving from less developed regions and not provided with jobs in basic and service sectors are employed. They satisfy the demand for unskilled labour.

Figure shows the author's vision of the roles of the aforementioned sectors in the development of a region's economy. Each of the three main sectors is characterized with inhomogeneous geographic distribution. The informal sector is localized and being developed in the areas with steady demand for unskilled labor. The geographic economic structure of a region depends on the specifics of formation, development and specialization of two main sectors: basic and service one.

Let us see how the author's modification of the Laurie model shown in Figure explains the emergence and spatial location of integration clusters of enterprises and companies in the service sector. The companies and enterprises of the basic sector which provide export of goods and services are budget revenue generating businesses and, therefore, their development results in growth of service enterprises, rise in consumption in the household sector and welfare of the population. That is why development control of integration clusters of service enterprises in the region is based on control of basic service sector development.

**Four sector structure of a region's economy**



It is known, that growth in the population's quality of life and level of service consumption is directly interrelated. As it follows from the research done by V.A. Degterova, as the economy advances, there is considerable change in the consumption structure and, in particular, there is change in requirements to forms and conditions of service provision. Consumers look for opportunities to satisfy a wide range of services, minimize time and cash expenses for this process. This trend gives rise to horizontal integration clusters.

With strong competition in the service sector, which results in price homogeneousness for supply of similar services, the most important criterion of competitiveness for a service enterprise/company is minimization of time expenses, which leads to transport availability of the services for the consumer. Analysis of the experience of European countries, conducted by foreign researchers, such as Hopfer A., Kowalczyk C., Huml M., Jazoj A., Stanfield J.D., Barj T. can identify the main factors which forms a fee for land use (Hopfer, 1999; Huml, 2011; Jazoj, Stanfield and Barj, 1998). Firstly, these include factors of location, such as: site plot, location in town (agglomeration), availability of utility lines. Secondly, economic factors which include: the level of demand for land in the city (agglomeration), income, which was obtained by previous owners, size and purpose of already made investments. Thirdly, institutional factors: Regulatory Position and limitations, associated with the use of the site.

The level of demand for land is formed by factors:

- geographical proximity (access to transportation) of the land to the city center;
- the objects of consumption of human capital;
- service infrastructure.

In the theory of spatial economics there are three major models of land use:

- concentric one, which implies gradual fall in the price of land in terms of the city agglomerations;
- sector one, which is based on the fact that there are radial roads, which go from the central business neighbourhood and form sectors where certain business activities are located. Difference in availability of sites in these sectors determines difference in price for land plots;
- multicore one, which allows existence of several big centres that set the tone to the economic development of the area.

Location of vertical integration clusters can be described with the G. Colb model of correct location of clusters. Its current modification made by the author of the present research in accordance with the subject of the latter implies the following changes comparing to the original model:

- big cities are the areas where vertically integrated service enterprise/companies are concentrated;
- distribution of vertically integrated enterprises/companies in smaller towns depends on the demand cone; villages are on the periphery of service supply.

Overlapping of the Laurie and G. Colba models allows creation of a generalized model for geographic distribution of integrated service sector enterprises. The price of land is formed in primary and secondary market. Thus, the Land Code of the Russian Federation says that individuals and legal entities involved in economic management or operating control of immovable property located on the land plots owned by the state government or local councils get the right for the use of the land plots. Individuals and legal entities who own the property get the exclusive right to privatize or take on lease the land plots where such property is located (Asaul and Skumatov, 2005). Depending on the population size in the location the price is set by the constituent entity of the Russian Federation in the following way: over 3 mln people – 5-30 times of the land tax rate for a space unit of the land plot; from 500 thousand to 3 mln people – 5-17 times of the land tax rate for a space unit of the land plot; up to 500 thousand people, as well as outside the bounds of a settlement area – 3-10 times of the land tax rate for a space unit of the land plot.

Some constituent entities of the Russian Federation, when defining the price of sale for the land plots for the owners of property located on these plots do not set different-fold amounts of the land tax rate, but just set a single amount, applying, most probably, the principle of pumping up the budget. Other constituent entities differentiate when defining land price and set different-fold amounts of the land tax rate for a space unit of the land plot. With such differentiation the constituent entities of the Russian Federation have tried to consider both the interests of the country and those of the buildings and facilities' owners.

**Table 2: Model of geographic location of integrated sector enterprises**

The Laurie model			
Basic sector	Scientific and educational cluster	Tourist recreational complexes	Tourist recreational complexes

Service sector	Hotel chains Vertically integrated bank structures Retail chains Household multi-services	Vertically integrated bank structures Retail chains Household multiservices	Regional personal services chain enterprises
Households		-	-
Informal sector	-	-	-
TheColb model	Cities	Towns	Villages

Accordingly, one can say that it is preferable to differentiate when setting the land price to be sold to the owners of property. There are several reasons for this. Firstly, sale of land in settled areas increases the efficiency of land plots application when used not only by owners but also by state government and municipal units. This increases budget revenues, attracts additional investment in development of both settled areas and business activity. It can be explained by the fact that any settled area, for example, a city, will have to create a database on actual land use in different neighbourhoods of the city. In addition, it is possible to reveal areas that are free or used irrationally and can become a reserve fund of the city land, which will enable to increase land fees to the budget in the form of land tax or rental. In other words, city land is more effectively used and has a bigger pay-off. Moreover the city can build a reserve fund for implementation of municipal investment programs and projects.

Secondly, the purchased land plots will become a potential secondary market of land in the settled area.

When assessing the land for sale in the secondary market, real market value of the land plot is estimated. This assessment is needed for calculation of the rental for the use of the land plot. The final cost of land depends on the following factors:

- location;
- price level in the land market;
- expected revenue from use (potential);
- specific factors (related with intended and standard use of the land plot).

Land is viewed as a factor which may bring income to entrepreneurs. It is a sale object and can provide its owner with income. The lowest limit of land earning power is bank interest which the owner can get when depositing the money, meant for purchase of the land, in a bank. Thus, the price of land is a capitalized rental, which is calculated in accordance with the usual bank interest rate. The higher the rental income is and the lower the bank interest is, the more expensive the land plot will be and vice versa. The price of land also depends on demand for land and its supply. The higher the demand for land is with its supply stable, the higher the land price will be, and conversely. The land plot is sold only in case the revenue from this deal placed as a deposit gives income not lower than the rental obtained from this plot. The price of land is capitalized rental and, finally, it is the thing which determines the price of land.

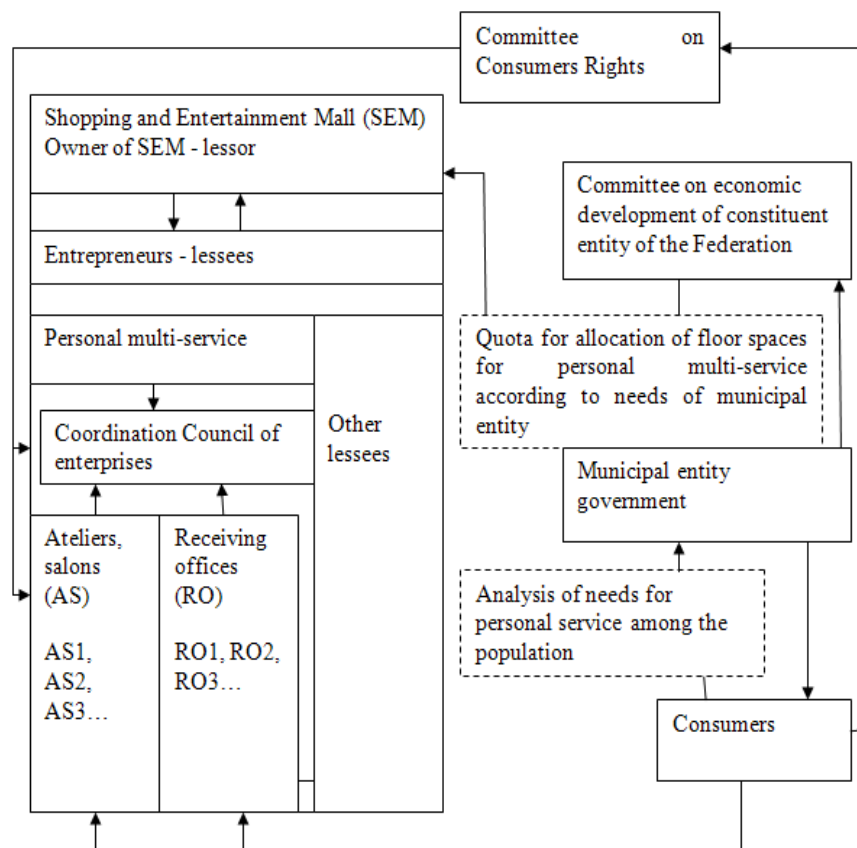
We introduce the following hypothesis: the higher the price of land is the bigger the demand is for the services of service enterprises and businesses and, correspondingly, the stronger the competitiveness between them becomes, which makes them integrate in order to increase their own competitive advantages. The statements mentioned above can be illustrated at the example of prices for residential real estate. Economists when researching problems related with development of residential accommodation in big cities identify factors that, apart from the quality of accommodation itself, affect its price. N.V. Ivanova has identified and ranged seven such factors, defining the rank by value of the relative importance coefficient. According to her calculations the most significant factor is that of transport availability ( $KOB=0,298$ ). The factor of the development level of the social and living infrastructure takes the second place ( $KOB=0,167$ ). The next ones are environmental factor, status value of the neighbourhood, housing system, administrative division of the area and social status of the population.

A big contribution to the economy of a city can be brought by such a form of horizontal integration of the service enterprises as multi-services. Experience has shown that multi-services, like shopping and entertainment malls,

can be found not only in big cities, but also in towns of Russia and they are one of the main types of assets for a territorial entity. One building combines such places for leisure and facilities for it as fitness clubs, gambling machines, bowling, etc. All of them, as a rule, are highly profitable and, correspondingly, have a high investment attractiveness. A personal multi-service is a multi-industry complex of enterprises and sole traders who provide the population with personal services and are located within reasonable walking distance from each other (Efremov, 2008).

Geographic distribution of integration clusters in the personal service sector is primarily the task for the local government, their support should be provided in city councils. They must, to a greater extent, provide practical help when multi-services are created as new organizational form of personal service and assist in construction and reconstruction of buildings for cooperative enterprises and companies of personal service and leisure. The author of the present research find it reasonable to locate a personal multi-service on the floors of shopping and entertainment malls, which have underground parking lots (which are necessary for accommodation of car services). An approximate scheme for interaction of entrepreneurs, regional and municipal government bodies when creating a multiservice is shown in Figure.

**The scheme of interaction between entrepreneurs and regional and municipal government bodies when creating a household multi-service**



## CONCLUSION

If a personal multi-service is located on the premises of shopping and entertainment complexes, it has the following advantages, in the opinion of the author of the present paper:

- the population of the region has the opportunity to access simultaneously to a wide range of services: personal, trade, entertainment, tourist, etc.;
- there is growth in passing trade of ateliers, salons and receiving offices of personal service enterprises, outlets due to high footfall of shopping and entertainment malls;



- owners of small personal service businesses and sole traders who provide personal services and are members of the personal multi-service on the floors of the shopping and entertainment mall.

This example allows us to define factors which indirectly characterize high attractiveness of land plots where shopping malls are located for entrepreneurs and which, correspondingly, affect the amount of rental obtained by lessors, who own these shopping malls:

- the level of consumer spending of households;
- the number of students in higher professional education institutions for 10 000 people of the population;
- commissioning residential and non-residential buildings;
- density of public railway lines;
- density of public automobile roads with hard surface;
- the number of connected user terminals for mobile radio telephone connection for 1000 people of the population;
- proportion of households which have a personal computer and Internet access in the total number of households of the corresponding constituent entity;
- turnover in retailing;
- the scope of chargeable services to the population;
- the scope of personal services to the population;
- the scope of communal services to the population.

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# MODELING HIGHER EDUCATION ATTRACTIVENESS TO STAND GLOBAL ENVIRONMENT

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## ABSTRACT

*Concepts, rol of internal units, and processes for international insertion of education seem to lack the links between real environmental trends and the internal capabilities, frustrating many efforts, approaches and strategies to global education. Higher Education Institutions (HEI) need to approach internal value attributes to increase attractiveness to stand better to global environment. In this article, a theoretical essay, we approach the problem of creating institutional attractiveness, under the necessary strategy to assess opportunities and to align and build internal capabilities. The issue of attractiveness addresses main institutional strategies to build value attributes on tink tank elements that influence attractiveness of higher learning institutions in the global environment.*

*Keywords:* Higher learning, global environment

## INTRODUCTION

Conceptual misleading and operational unpreparedness on global issues, nonetheless, may induce HEI's managers to drive internal endeavors that bolster global vision and values in the institution, to discontinuities and disruptions. One main reason could be that concepts, rol of academic units, and processes for global initiatives may lack the links between real environmental trends and the internal capabilities. Another important reason could be that HEI managers neglect to adequately select and align the elements that forge institutional attractiveness, especially when it comes to stand those issues. In a recent research among students in Australia on intangible attributes that would support students' decision in the process of selecting universities, Shanka & Terigin (2009) found that issues, such as, national and international recognition, and intercultural mix, were among the three most valuable attributes on students' decision to apply for a university. Authors limit the research scope, however, simply to list intangibles in the hopes that marketing department would find it useful, in some way, to communicate better with prospective candidates to university. The research did not go further on deepening the issue or evaluating strategies to address intangibles towards institutional attractiveness. It stands from the point of view of students only, not considering combinations of internal capabilities and competences of the institutions as attraction platforms.

To look at the market and try to figure out what are key in a university, under consumer perspective, to be considered as paradigm for attraction and fitness of students in an institution is one way to approach and rationale the issue. By doing this, we are focusing on market perspective and behavior to imply institutional attractiveness. Most expert literature on value attributes for Higher Education (Tontini and Silveira, 2005; Mainardes, 2007; Broneman, 2003), use to identify most key elements of institutional attractiveness through students and alumni perceptions. The other way to find value attributes is to look inside the institution and identify internal resources, processes and capabilities, to lay the fundamentals of an institutional strategy to stand global issues with influence on HEI.

The effectiveness of a strategy to stand the implications of global issues on higher education, in many ways, relies on the combination of the internal resources, processes, technologies and capacities to face external forces from market and environment. Externally, global issues and the internationalization of the education become a necessary matter to faculty, either as a perspective or as a subject matter for institutions that pursue developing global citizens. The interdisciplinary character of learning processes in the knowledge economy and its implication for carriers and professions in modern society, make global issues important and decisive to influence current curricular contents and administrative drives in HEI.

Internally, the right combination of internal resources requires attention to set and develop institutional skills to deal with existing or upcoming issues identified in the environment. For institutional purposes, it may be necessary to build a basic set of institutional value attributes that ensure usefulness of internal endeavors leading to enlarge attractiveness. To build attractiveness, however, the institution must combine the right set of value attributes and a basic resilient capacity.

In this article, a theoretical essay, we approach the problem of creating institutional attractiveness, under an internal viewpoint, that is, under the perspective of aligning internal resources to prompt the institution to face global issues. The questions we discuss here refer to some possible routes that an institution can take for building and consolidating tangible attributes, since these attributes are the ones responsible for forging the basic layers of institutional attractiveness. That means what are the strategies presumably available to create attractiveness in the context of global issues influence. And, finally, what is the rationale behind the internal alignment endeavors to reach attractiveness.

## **THEORETICAL PRECEDENTS**

To answer all those questions, that is, to demonstrate the relationship between institutional value attributes and institutional attractiveness, we explore the theory of ambidexterity (Birkinshaw & Gibson, 2004) and theory of organizational resilience, as the fundamental layers. In spite these theories been proposed through research in organizations, as they differ little in terms of the role of ambidexterity, resilience and institutional value attributes, here we refer interchangeably to institutions. Building on these theories, we show the implications of leading global changes into internal arrangements of resources, processes and capacities.

### **Ambidexterity**

Ambidexterity reflects a dual complementary movement – adaptation and alignment - an institution ought to do to respond environmental changes (Birkinshaw and Gibson, 2004). Adaptation means the ability to identify and quickly jump into new opportunities. Alignment involves internal adjustment and a sense of coordination and rationalization of processes and capacities in order to create institutional values. Thus, ambidexterity means institutional responsiveness (adaptation) to pressure and changes from external forces while rearranging (aligning) internal capabilities and competencies to deliver institutional objectives. Ambidexterous capabilities may be considered one of the most difficult balance to be reached by executives. Their attention focuses, generally, one or another process - adaptation or alignment – to rationalize internal resources, or to search and jump into new opportunities (Hamel and Välikangas, 2003). That is why most organizations show a peak in performance for some times in their trajectory based on one type of business model, but succumb next step because they fail to balance adaptation with alignment.

As accepted by traditional literature, organizations are, by concept, structurally ambidextrous (Duncan, 1976). However, the recent process revolution has been characterized by a new vision on the function of organizational structure, from a collection of departments with distinctive function, to a more intertwined process and systems. This vision links, in a systemic way, the organizational functions and activities, allowing business to be more agile and effective (Dean and Bowen, 1994).

The process vision of an organization roofs a new concept of ambidexterity, the contextual one. In fact, ambidexterity can be spreaded out among people operating in any hierarchical layer of an organization. Employees divide their time between adaptation and alignment activities (Birkinshaw and Gibson, 2004),

pushing the decision making system regarding adaption and alignment closer to front end people. Ambidexterity also requires a more functionally generalist people within the institution, but with a higher degree of initiative. Therefore, corporate entrepreneurship is the best people's profile for an institution struggling to develop an ambidextrous character. For value attributes building, ambidexterity importance falls in its role as the structural strategy to set the dynamics of attractiveness building.

## **Resilience**

Resilience (Reinmoeller and Baardwijk, 2005) refers to the ability of an institution to become responsive to external changes with similar effectiveness regardless the nature of the change. In other words, as an institution becomes more and more resilient, the greater is the elasticity of its attractiveness. Resilient institutions acquired internal ability to reposition themselves, renew and innovate. The self-renewal ability of an institution delivers among three end results: (a) corporate or institutional attributes; (b) risk protection; and (c) process capacitation.

Process capacitation is fundamental for the institution to self-renewal and innovate. The main impact of process capacitation, however, will fall on the operational effectiveness. As most of the innovation within the institutions are incremental in nature, process capacitation becomes one area of major attention and an area where institutions may propose most changes. In other words, process capacitation, besides supporting most innovation will become a critical area for institutional dynamics.

Risk protection refers to the ability of the institution to guarantee continuity, that is, as the institution becomes more resilient, she enables herself to resist more to environmental changes, to increase elasticity to crisis and thus, to expand institutional attractiveness. This protection, naturally, blinds the institution against fortuitous or even gradual business discontinuity (collapse, bankruptcy, etc).

Corporate or institutional attributes regards to a set of value attributes that should be perceived by users of the institution, say educational services, to create attachments between users and the institution. As these attributes develop attachments, they also increase attractiveness of the institution with her audience. Again, this ability involves building value attributes, processes, capacities, technologies and deliveries that help the institution to generate resilience (Hamel and Välikangas, (2003). For instance, designing curricula for global learning (ACE, 2014) falls in the category of tangible, fundament value attributes.

Finally, expert literature recognizes three sources for building resilience: (a) exploration; (b) knowledge management; and (c) external cooperation (alliances) (Birkinshaw and Gibson, 2004). Exploration means experimentation of new ways or recombination of new knowledge available in the institution. A second source to build resilience in the institution is knowledge management, that is, the reuse of knowledge, tacit or explicit, accessible within the institution. And external cooperation is linked to the assessment and reuse of partners' knowledge, complementary or new, available in the surroundings of the institution.

In terms of analysis for decision-making, value attributes are the basic elements through which users perceive the benefits of educational services. They buy them (the education services), because the weight of value attributes results in benefits greater than the perceived cost to acquire them.

## **Value Attributes**

Important to notice also that, value attributes and resilient capacity are intertwinedly linked. As the institution earns the capability to respond to external trends it also sets up institutional resilience (Reinmoeller & Baardwijk, 2005). Value attributes are the instrumental packing of elements that institutions hold as their resilient platform perceived and seized up by the institution's audience as the attractiveness links. That is, value attributes depict the way each institution shows what its competences are and how much it cares for the students. Hence, by reinforcing perceptions of quality and delivery of educational products, value attributes, in fact, become the balance between basic acceptance and attractiveness of the institution to its constituency.

Because of the centrality of value attribute to the comprehension of the argument of this essay, we use here the concept Woodruff (1997, p. 142), to define value as "the preference and evaluation of product attributes,

performance of attributes and consequences from use them to facilitate reaching objectives and an end situation.” This definition incorporates the perception of attributes in products and the perception of what attributes mean in terms of performance and use, towards an end situation.

From the expert literature, we can pinpoint a set of value attributes, that are, at first sight, disperse regarding common sense among them. We identified most of our list of attribute, from two main approaches. One line of research, including Bronnemann (2003); Mainardes (2007); Mainardes and Domingues (2011), focuses on students perception of what values are important or influence the degree of attachment (attractiveness) to an specific institution. All value attributes originated on students perspective – institution accessibility; course design; course quality; innovation; continuing education; professional success; institution image and differentiation, to name some – are selected data from this line of research.

A second line of research focuses on the institution’s perspective, that is, from inside out to market (Tontini and Silveira (2005). Values, such as replacement (implying course work, services); continuing education; availability (array of courses; localization); compatibility and the likes, result from an internal assessment of institutional capacities offered to students. In any case, research data listing value attributes are not classified in terms of common characteristics. Lin (2002) argues that values can be classified into abstract and concrete, according to the degree of intangibility. Price, for instance, is a value classified as concrete, while mark may be classified as abstract. In this paper, we use a little distinct classification, dividing also into two groups, but we divide into tangible and intangible value attributes.

Using the rationale of tangible and intangible classification of value attributes, a matrix could be formulated to create resilience and attractiveness. Frame 1 shows the basic set of value attributes an HEI must appropriate to gain trust in global environment issues.

**Table 1. – Value Attributes of HEI**

<b>Intangible Attributes</b>	<b>Tangible Attributes</b>		
<i>Personal</i>	<i>Operation</i>	<i>Fundament</i>	<i>Access</i>
<b>Mark</b>	<b>Easy of use <sup>(3)</sup></b>	<b>Technology <sup>(9)</sup></b>	<b>Price</b>
<b>Image</b>	<b>Usability <sup>(4)</sup></b>	<b>Quality</b>	<b>Financing</b>
<b>Status</b>	<b>Professional Success <sup>(5)</sup></b>	<b>Compatibilidade <sup>(10)</sup></b>	<b>Revolver Credit <sup>(14)</sup></b>
<b>Differentiation</b>	<b>Updating <sup>(6)</sup></b>	<b>Integrated Education <sup>(11)</sup></b>	<b>Accessibility <sup>(15)</sup></b>
<b>Relative Perception <sup>(1)</sup></b>	<b>Continuing Education <sup>(7)</sup></b>	<b>Design <sup>(12)</sup></b>	<b>Availability <sup>(16)</sup></b>
<b>Feeling <sup>(2)</sup></b>	<b>Replacement <sup>(8)</sup></b>	<b>Innovation <sup>(13)</sup></b>	<b>Impulse <sup>(17)</sup></b>

1- = Positioning      2- = Affiliation      3- = Professional Restrictions      4- = Usability of the Profession      5- = Alumni Success Index      6- Pedagogical Updating (content and professiographic Profile).      7- = Continuing Education (alumni)      8- = Replacement (curses, services)      9- = Educational Technology      10- = Professiographic Profile as expected by society      11- = Transdisciplinarity of contents;      12- = Appropriation of Institutional Values (value creation and seizure)      13- =Novelties; Differentiation      14- = financing in installments;      15- = Hurdles to entrance and level of retention      16- = Product/services Major Portfolio; Ways and Local to access offer;      17- = Intuitive acquisition.

In the matrix, intangible value attributes category depends on the incorporation and practice in the institution of values grouped under the two categories: Intangible and Tangible attributes. Intangible attributes are personal, that is, are attributes unique to the institution as perceived by students, responsible for institutional ability to attract and hold students. Tangible attributes – Operational, Fundament, Access – are the ones the institution can manipulate directly. Access attributes, for instance, depend more on management practices.

Fundament and Operational depend on faculty, as content builders (curriculum, material and knowledge builders) or as format deliverers.

## Discussion

Significant global trends may mean threat, but it could imply good opportunity for HEI to increase attractiveness. The best mechanism for an institution to build resilience to better deal with global issues is becoming an ambidextrous institution. An ambidextrous institution will struggle to find equilibrium between adaptability and alignment. Adaptability help the institution identify forces in the external environment with influence on operational effectiveness, optimization of resources and the right delivery of services and education.

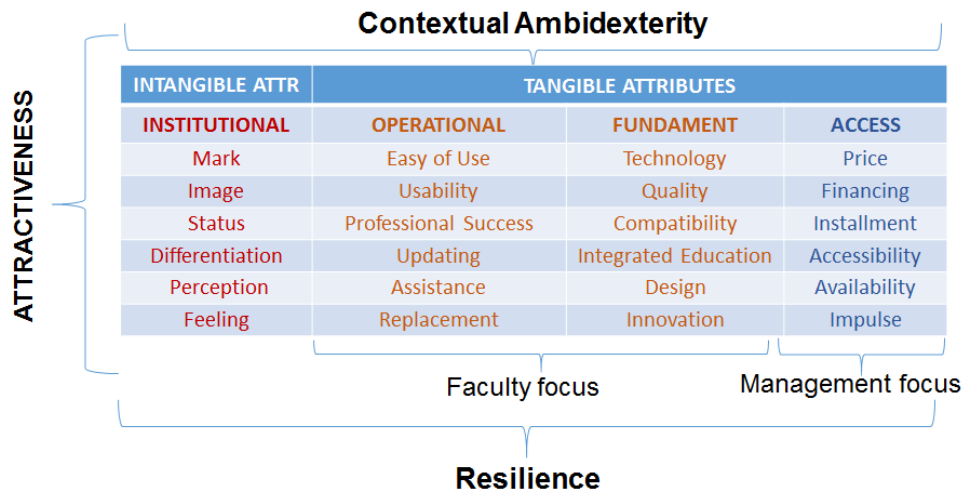
Alignment may support better the combination, or recombination, of processes, educational technologies, capabilities and institutional competences. Alignment is necessary to guarantee the overall performance and back up to market strategy of the institution. The combination of adaptability and alignment would drive then all key elements that are a part of the institution's business model. Institutional ambidexterity, thus, becomes a critical instrument to start internal dynamics leading to a greater attractiveness.

In HEI, ambidexterity can be recognized as one important factor of institutional visibility. It indicates acceptance by society of institution's standards, when this latter shows compromise to delivering superior quality of educational services (Dalmarco et al., 2012). One problem with ambidexterity, however, is that structural ambidexterity – where the institution holds some departments focused on internal and others on external activities – is not the answer for integration and external responsiveness. For instance, academic departments are internalist in nature (Stankiewicz, 1986), but Marketing and International Relationships (IR) are externalist. International Relationships department does not always holds institutional power to make academic departments to introduce or to consider global issues in their routine activities. Contextual ambidexterity (Birkinshaw and Gibson, 2004), therefore, seems to be the concept to be considered here, since it transfer to individuals and groups, spread in any hierarchical administrative or academic layer throughout the institution, the responsibility for identifying external opportunities and matching internal solutions.

In this sense, it is important that HEI's top management rely upon specific policies and mechanisms to stimulate contextual ambidexterity. In fact, to deal with global issues and appropriate or optimize internal resources the institution will need to stimulate corporate entrepreneurship. The recognition and stimulus to the various types of internal entrepreneurs (academic entrepreneurs) – multitask, cooperative, proactive and negotiators (Birkinshaw and Gibson, 2004), would bolster institutional competence, especially regarding to the necessary processes, capacities and competences that must be triggered to face global issues. If corporate entrepreneurs become centered model, the institution would be prompt from within, with greater effectiveness to react or anticipate global trend with influence on the institution. Additionally, the institution would be much prepared to deal with the process of building internal resilience.

Figure 1 shows the implications of ambidexterity development on attractiveness, using institutional resilience, through value attributes. Contextual ambidexterity is the macro institutional mechanism that will prompt the institution to stand global trends. It allows the institution at the same time to identify global trends with implication over its offerings, select opportunities, point threads and define what would be the specific strategic issues (Bryson, 1995) the institution should deal with. Of course, this process could not be monitored and determined top down with greater effectiveness than involving the institution as a whole, specifically academic entrepreneurs.

Institutional efforts to develop one or a specific set of values, therefore, should target at enhancing the intangible category of attributes that will guarantee attractiveness to prospective candidates. The addition of value attributes to the deliveries of an institution, however, can guarantee neither performance, nor attractiveness to the institution. Solutions generated to solve paradigmatic problems, originated in global, either the political, economic, social and or the educational scenarios, require institutional skills to perceive and carry them on, through institutionalized instruments. The final target must always be to increase institutional attractiveness. As pointed above, contextual ambidexterity should be the first one these instruments.



**Figure 1.- Relationship between Ambidexterity, Resilience and Attractiveness**

A second one, as important, it is resilience, based on a platform of value attributes. One way to look at resilience, is to acknowledge Hamel and Välikangas (2003) vision, for whom resilience is a dynamic capability of an organization to self-renew through diverse and simultaneous sources of competitive advantage. Reinmoeller and Baardwijk (2005), on the other hand, argue that resilience is a basic case of corporate strategy. It relates, therefore, to an institution's ability to reinvent itself based on innovation. Exploration, knowledge management, cooperation and entrepreneurship are incumbent strategies to create corporate resilience. In HEI context, resilience based on value attributes may be used to overcome the global scenario's setbacks influencing institutional loss of attractiveness. The elements of the resilience – tangible and intangible attributes – serve as platform where resilience will straighten perceived deviation to students, such as outdated process and solutions.

Figure 1 shows the matrix of value attributes, classified into two dimensions – Intangible and Tangible – and into four categories: *Intangible Attributes*: (1) Institutional – *Tangible Attributes*: (2) Operational; (3) Fundament; and (4) Access. Institutional resilience regarding loss of attractiveness due to global trends not faced by the institution, counterparts losses with an array of well set value attributes. Institutional attractiveness is a function of well position institutional intangible attributes. However, visibility of intangible attributes, causing attractiveness, can only be increased or manipulated through the set of tangible ones. Access category, for instance, concerns mainly to administrative staff. Price and financing policies and the likes in this category are normally dealt with through administrative decisions. Decisions not aligned with institutional or strategic objectives may cause damages to intangible attributes. For instance, if the institution operates in the social segment C and D Classes and under an international crisis with effects on the economy of the country, will ask for alternative solution other than price increasing if the number of students falls. Such bad decision could damage the image, the mark and the feeling attributes of the institution, because it could be seen as a sign of insensitivity of the institution towards the difficulties of the segment it serves. In consequence, there may be irreparable loss of attractiveness.

The next two categories (operational and fundament) link mainly to academic and teaching activities. It concern to curricula development, professiographic design of the degree, innovation (in format and content of curricula and courses), teaching excellence (quality) and the likes. Developing these attributes is not only a question of internal competence to change and evolution. It is also an acute sense of identifying demands and opportunities transparent among global trends, reached through contextual ambidexterity. It may be well evident the role of academic entrepreneurs, as defined here as the promptness to initiatives within institutional objectives. Faculty may explore academic opportunities for mobility (including student mobility), for research, for teaching and services. External alliances with internationally visible groups and experts to create visibility and internal capabilities are also a major part of developing operational and fundament value attributes.



The development of the tangible would assure consolidation of the intangible value attributes. Attractiveness, despite of being transparent to constituency of the institution may not be perceived through its tangible attributes, so it needs to build the intangible ones. Intangible attributes, in fact, influence perception of institutional constituencies bringing out feelings of attachment because of perceived benefits.

## Final Remarks

Our argument is that building resilience is the way, but not necessarily the answer to attractiveness. We see contextual ambidexterity in the institution as the trigger to spark the process of perception and capture of global issues and bringing them over to the attention of the institution community. Hence, it initiates internal alignment of resources, capacities and processes leading to resilience. Resilience, however, is not built only through value attributes as classified above. It reports to alignment of the elements of corporate strategy (Rodrigues et al., 2004), development of tangible value attributes, consolidation of intangibles and, thus, enlargement of attractiveness. The responsive performance of the institution to external and global issues relies on people, mainly academic entrepreneurs. Specific resilient strategies must be add to alignment to ensure efficacy of value attributes and enhancement of attractiveness.

Contextual ambidexterity integrates tasks and function to create institutional resilience through value attributes, resulting in higher degree of attractiveness. We hope to have reach to the expected main results of this essay, that is, the demonstration of linkages between ambidexterity – contextual ambidexterity – as the major institutional strategy to straighten HEI before distinct forces in the global environment. Contextual ambidexterity becomes than the channel to align internal resources and to drive endeavors to build resilience, especially based on value attributes. The combination, emphasizing routes of tangible value attributes on the platform of resilience, will consolidate the intangible ones, with immediate reflects on institutional attractiveness.

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# **THE PERCEPTION OF MANAGEMENT ACCOUNTING IN THE PORTUGUESE LODGING INDUSTRY**

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## **ABSTRACT**

*The perception of management accounting (MA) in the management of Portuguese hotels is a very interesting area of research, because it is important to be aware of the needs of hoteliers. Most hotels have been changing their management, so MA has changed too. A lot of MA techniques are concerned with the preparation of specialized information. MA techniques that are currently being used by different types of Portuguese hotels have been studied, and the importance given to them was investigated. One of the conclusions of the research is that MA techniques are used in Portuguese hotels especially for decision-making. A diversified use of MA in Portuguese hotels was found. However, it should be noted that when the decisions are made with the help of the subordinates, there is a greater use of MA techniques.*

*Keywords:* Management Accounting, Decision making, Lodging Industry, Hospitality management.

## **INTRODUCTION**

This study aims to analyze the perception of the management accounting (MA) in the management of Portuguese hotels. There are a lot of MA techniques that are very important for all of kinds of the managers, such as break-even point, budgeting, product costing techniques. So it is imperative to be aware if managers of Portuguese hotels have the same opinion. Most hotels have been changing their MA techniques, because the environment is changing all the time. So, management accounting has also changed to provide the necessary information. According to Yalcin (2012) MA techniques differ along the countries and along the organizations. Chong (1996) thinks that accounting information reduces the uncertainty of managers in their decisions. Zounta & Bekiaris (2009) refer the necessity of using accounting information because it will improve the decisions of hotel managers. According to Mia e Patiar (2001) and Yalcin (2012), the hotel managers use MA techniques for both short-term and long-term decisions. The present research project has selected as object of the study, the Portuguese hotels. The sample includes 61 hotels, which were analyzed in the years 2010, 2011 and 2012. What the hotel managers think about the importance of MA in the management of hotel is our purpose of this study.

## **LITERATURE REVIEW**

Management accounting is an important part of information system with a key role in decision-making for all organizations organization (Aver & Cadez, 2009, Brewer et al., 2013 & Zare et al., 2013). In the recent years MA has seen a strong evolution. Zare et al. (2013) and William & Seaman (2002) refer that some evolution in MA allows better decision-making, because the information becomes more relevant. The use of MA improves the quality of decision-making (Zounta & Bekiaris, 2009; Shoommuangpak, 2011). Zounta & Bekiaris (2009) proved this through a study to Greek Luxury Hotels. MA presents some features very important for the managers like relevance, reliability, comparability (Zare et al., 2013). Taking in consideration Williams & Seaman (2002), there is a proliferation of new MA techniques, what provides value-added information for decision-making. The benefits of changes in MA are to produce relevant information to managers. Veeken and Wouters (2002)

confirmed that higher-level managers used accounting information as an output measure, so they need the information to know what projects deserve their attention. Accounting information may be particularly informative for cost control during execution. Acquah (2013) says that MA techniques help the definition of the business strategy of an organization and the performance assessment. The internal decision-making and the cause effect relationship can require a lot of specific models, where MA can answer several questions. Indeed, MA can provide detailed information about the future, and this information allows decrease costs implying an increase of the results (Faria et al., 2012 & Brewer et al., 2013). Raab et al. (2009) and Vaugh et al. (2010) corroborate saying that MA techniques are important to understand the cost structure of organization which is very useful to understand the profitability. Decision-making should be based on MA techniques or in accounting information (Williams & Seaman, 2002; Zounta & Bekiaris, 2009; Shoommuangpak, 2011). In the opposite sense, Jawabreh (2012) analyzed the relationship between accounting information system and decision-making in four and five star Jodhpur Hotels, but they have not found any relationship between accounting information and decision-making.

The main function of MA is to provide important information for the managers, who need high quality information for decision-making. However, the utility of MA it is not only for managers but also for the employees of the organization (Aver & Cadez, 2009, Brewer et al., 2013 & Zare et al., 2013). Though Tillmann and Goddard (2008) refer the importance of MA, but the managers have to know how to use it. Teles et al. (2013) say that the controller is fundamental in the decision-making. When the hotels were analyzed in the states of Brazil like Rio Grande do Sul, Santa Catarina and Paraná, it was found that the controller make more operational decisions than strategic decisions. Contrasting, Aver & Cadez (2009) refer that contemporary management accountants participate to the strategic decision-making process. This participation changes accordingly to the organization. However, it is high in tourism and hospitality. Strategic decisions are riskier than operational decision. In Slovenia, management accounts have an active role in strategic management processes. Cadez & Guilding (2008) confirm this idea when they refer that management accountants are no longer information providers but they belong to the decision-making team. It should be noted that Alves (2002) studied the purpose of using contemporary techniques of management accounting in Portuguese manufacturing companies, presenting three possible purposes: decision-making, planning and control. He has found that most uses for the techniques of contemporary management accounting have the purpose of control. Specifically, benchmarking, activity based costing and target cost are used for control purposes. The customer profitability analysis is widely used in the monitoring and decision-making, while the product life cycle costing is used in decision-making, control and planning.

The hotels have characteristics that may influence MA such as perishable services intangibility, production and use at the same time, heterogeneity and intensity of labor (Downie, 1997; Faria et al., 2012). The hotels have been changing their management, because the environment is changing as well. During the last years, the hotel industry expanded and offered new services/products like rent conference facilities (Field, 2006). Zounta & Bekiaris (2009) refer a list of tourism products: lodging service, food service and beverage service, telecommunications service, laundry service, swimming pool service, safe deposit service and health service. Lamminmaki (2008) and Faria et al. (2012) refers that hotels face competition in different levels, such as brand image, market segment and price. It should be noted, that the competition depends of the location of the hotel, for example if there is some hotel nearby. Pavlatos and Paggios (2008) made a research in Greece, concerning the accounting techniques adopted by hotel units, concluding that traditional techniques have a greater use. Gomes et al. (2011) and Santos et al. (2013) reached the same conclusion regarding the Portuguese hotels, and Faria et al. (2012) when analyzed Algarve's hotels. The organizations give more importance to traditional MA techniques than to contemporary MA techniques. For several authors traditional MA techniques have a greater use if compare with contemporary MA techniques (Uyar and Bilgins, 2011). According to Faria et al. (2012) Budget is the technique with a higher utilization. However, there is poor use of Activity-Based Costing, Customer Profitability Analysis and Balanced Scorecard.

For the hotels that compete in a market of new services, the use of the new MA techniques is greater (Zounta & Bekiaris, 2009). According to Mia & Patiar (2001) there is not a big relationship between level of competition and the use of MA techniques. However there are exceptions, such as for the pricing, customer satisfaction and profitability. In these cases the managers use MA techniques for obtaining information. The managers use the MA techniques for long term decisions. They use more financial indicators for the evaluation of employee performance. Jawabreh (2012) refers that the use of accounting information it is more important in

environments surrounded by uncertainty, but, Williams & Seaman (2002) and Veeken and Wouters (2002) say that the uncertainty of the task does not influence the use of MA. According to Lamminmaki (2008), the relationship between accounting system and outsourcing decision depends of several factors. Some authors consider there is a relationship between organizational practices and the MA (Tillmann and Godard, 2008; Mouritson et al., 2009). Proponents of decentralization argue that companies adopt the MA techniques when the decision-making is held by different people within the organization (Gunasekaran et al., 1999). Sugijanto & Priyono (2013) refer that the increased of decentralization will be influence positively the decision-making. According to Cadez & Guilding (2008) strategy influences the success of MA. There are some MA techniques that exhibit a strategic orientation like costing, planning, performance measures, control and customer accounting. A prospector strategy and a market orientation become MA more important.

## **HYPOTHESES**

According to the literature, for most companies, the main objective of MA techniques is the decision-making process. It also is necessary to find out if adoption of MA has a relationship with the management of hotel. The hotel managers use MA information accordingly with their needs or purposes. However, there are several determinants that influence the relationship between MA and decision-making. In this study we analyzed the competition intensity, the perceived environmental uncertainty, the decentralization, the prospector strategy and the market orientation. The following hypotheses were formulated with these five variables: H1: The main objective of MA is the decision-making process; H2: MA is appropriate for the management functions; H3: The biggest users of MA techniques are the hotels where MA is considered important for a specify purpose; H4: The competition influences the use of MA techniques for decision-making; H5: The environments surrounded by uncertainty influences the use of MA techniques for decision-making; H6: The decentralization influences the use of MA techniques for decision-making; H7: The prospector strategy influences the use of MA techniques for decision-making; H8: The market orientation influences the use of MA techniques for decision-making.

## **METHODOLOGY**

The researchers use personal interviews for developing a questionnaire. It was adopted a quantitative approach (Yin, 2009). The interviews were conducted to the responsible of MA from the Portuguese Hotels through all over the country. The questionnaire structure was adopted from Gomes (2007) and it was used in our previous studies (Gomes et al. 2011; Santos et al. 2013). The sample includes 61 hotels from different categories and regions from Portugal, which were analyzed in the years 2010, 2011 and 2012. From these, 5 are foreign hotels, 54 are national hotels and 2 have some percentage of foreign capital. The annual turnover ranges from 16,000€ to 60,000,000€. Most hotels belong to Leiria (50.8%) and Lisbon (37.7%). In the statistical analysis, descriptive analysis, such as frequency and percentage, was used. Mann-Whitney test and Kruskal-Wallis test were performed to identify the relationship among (Pestana and Gageiro, 2008). The variables used in the empirical study are nominal and ordinal (measured on a seven-point scale). The factor analysis was carried out and the reliability analysis conducted to ensure the internal consistency of the variables (Kaiser-Meyer-Olking (KMO) measure of sampling adequacy and Cronbach alpha coefficient the Bartlett test of Sphericity).

## **FINDINGS AND DATA ANALYSIS**

In this study, of the 61 hotels, 78.7% (48) have implemented and use MA. The 13 units that do not use this practice are small hotels and work a long time ago. The MA techniques most used by inquiries are Budgeting, Budget Deviation Analysis and Strategic Planning, with 81.3%, 68.7% and 69.3% respectively. This corroborates with what is described in the literature review. The hotels use MA mainly with the purpose of supporting their decision-making process (79.2%), the budgeting process (70.8%), elaboration of income and loss statements (64.6%), support management information systems (62.5%), estimate cost of products/services (54.2%) and calculate gross margin per product/service (52.1%). So the **H1** is not rejected. The decision-making process is a priority. However it is important to highlight that hotel managers consider important MA beyond the decision-making. The hotel managers (more than 50%) have chosen other alternatives. It should be emphasized that MA is not considered very important for pricing. This corroborates with the literature which states that the price information comes from the market.

Is MA appropriate to several management functions? The conclusion is that the functions to which this information is more appropriate are to support the decision-making process and to estimate cost of products/services, with a mean score of 5.87 and 5.66 respectively. However, for all of the management functions the mean is greater than 4, except for the evaluation of human resources, where MA is inadequate. Through the Mann-Whitney test, it was defined H0: The distribution of adequate MA is the same across the categories of users of MA for purpose of using MA. Ha: The distribution of adequate is different across the categories of users of MA for purpose of using MA. The opinion of the managers is the same about the suitability of MA, because H0 it is not reject. Regardless of the chosen purpose, the managers have the same opinion about the suitable of MA. However there are some minor exceptions. When the purpose is Elaboration of Income and loss statement, the MA is more suitable for the profitability of customers for the hotel managers that have chosen this purpose. When the purpose is Decision-making, the MA is more suitable for the Profitability of products and services for the hotel managers that have not chosen this purpose. So it is not reject H2.

Then it was analyzed if the use of the techniques changes according to the purpose chosen (over 50% of responses). The Mann-Whitney test was chosen with the following Hypothesis: Ho: The distribution of use MA techniques is the same across the categories of purpose of using MA. Ha: The distribution of use MA techniques is different across the categories of purpose of using MA, with a significance level of 0.05. The H0 for the purpose of Estimate cost of products/services and Calculate gross margin per product/service is not rejected. The use of MA is the same in the hotels that use MA for these purposes or not. However, when Elaboration of Income and loss statement is chosen, some differences were found in the use of Tableau de Bord, Return on Investment, Activity-Based Costing and Product Life Cycle Costing. In hotels which have chosen this purpose, there is a greater use of these techniques with a significance level of 0.05. When Decision-making is chosen, it was found some differences of use in Customer Profitability Analysis. In hotels which have chosen this purpose, there is a greater use of this technique with a significance level of 0.05. When Support management information systems is chosen, it was found some differences of use in Budgeting, Budget Deviation Analysis, Product Profitability techniques, Tableau de Bord, Return on Investment Benchmarking. In hotels which have chosen this purpose, there is a greater use of this technique with a significance level of 0.05. In other words the differences are not significant for some purposes. However for some purposes and MA techniques there are significant differences. So it was rejected partly H3.

In order to analyze the intensity of competition, taking into account the importance that is given to management accounting for decision-making, it was compared the levels of competition (price, labor force, buying of goods, promotion) between the two groups. It was chosen the Mann-Whitney test, where it was defined the following Hypothesis: Ho: The distribution of intensity of competition is the same across the categories of decision-making. Ha: The distribution of intensity of competition is different across the categories of decision-making. It was not rejected the H0. The intensity of competition is the same in the hotels that use MA for decision-making or not. So it was rejected **H4**.

The perceived environmental uncertainty can be measure by several variables. The power of the forces affecting the industry from Porter (1985), the external environment faced by the company in terms of homogeneity and heterogeneity, the degree of expansion of the main market where the company operates, it was the variables chosen. These last two issues have already been used by Ferreira (2002). It was created the variable power forces, through of the six items (rivalry among existing competitors, threat of new entrants, threat of substitute products or services, power of suppliers, power of buyers, government). So it was analyzed, the Kaiser-Meyer-Olking (KMO) measure of sampling adequacy was 0.66 and the Bartlett test of Sphericity was 82.068,  $p < 0.001$ . The Cronbach alpha coefficients were 0.725 for the power (power forces), which indicates satisfactory internal reliability for the variable. So, it was constructed the variable power, calculated by the arithmetic mean of the six individual variables that characterize the power of the forces affecting the industry. It was created the variable environment, through of the three items (customers, competitors and market). So it was analyzed, the Kaiser-Meyer-Olking (KMO) measure of sampling adequacy was 0.566 (it is bad but allowable) and the Bartlett test of Sphericity was 50.066,  $p < 0.001$ . The Cronbach alpha coefficients were 0.736 for the environment (homogeneity and heterogeneity of the environment), which indicates satisfactory internal reliability for the variable. So, it was constructed the variable environment, calculated by the arithmetic mean of the three individual variables that characterize the environment of the industry. The third variable (the degree of expansion of the main market) it was a taking account the question that it was made to the hotel managers. If the

two groups (the users of MA for decision-making and the not users of MA for decision-making) were compared about the power, environment and expansion, it was found that the mean is higher in the users of MA in the case of environment and expansion. Regarding the variable power, the situation is reversed. It was chosen the Mann-Whitney test, to confirm, if there any difference between the two groups. Thus, with the following Hypothesis: Ho: The distribution of power/environment/expansion is the same across the categories of use MA for decision-making. Ha: The distribution of power/environment/expansion is different across the categories of use of MA for decision-making. It is not rejected the H0 with a significance of 5%, because there is not a significantly difference between the two groups. So **H5** is rejected.

On the variable that study the hierarchical level to which the decision is made, when the value is near of seven, it means that the decision made is done at the level of top management. According to the use of MA for decision-making, the use of MA in decision-making is higher when the decisions are decentralized, for example, they are taken at the level of operational management. However the difference is not significant, through the Mann-Whitney test. The kind of decisions was analyzed: makes decisions quickly and communicates to his subordinates firmly (43.8%), makes decisions quickly but tries to explain all the reasons before moving (33.3%) do not make decisions before consulting their subordinates (10.4%) and presents the problem to the group and try to get a consensus (12.5%). The Kruskal-Wallis test was chosen, which is used to test the equality hypothesis (Pestana and Gageiro, 2008) with the following hypothesis: H0: The distribution of the use of MA techniques among all types of decisions is equal in central tendency, and Ha: The distribution of the use of MA techniques among all types of decisions is not equal in central tendency. According to the Kruskal-Wallis test, the null hypothesis is not rejected, except for the techniques Budgeting, Budget Deviation Analysis, Product Life Cycle Costing and Activity based budgeting, where the null hypothesis is rejected to a significance level of 0.05. In the four groups considered, these techniques have a different central tendency. It was identified that the management accounting techniques are most effective when the decision is taking only after consulting their subordinates. So H6 is not rejected.

In order to analyze the prospector strategy, four variables were chosen: Changes in the product portfolio, Technological changes, Changes in the information systems and Changes in the diversity of products. When the value is near of 7, it means there is a prospector strategy in the hotel. So taking into account the importance that is given to management accounting for decision-making, the mean of the four variables was compared between the two groups. The hotels in the sample have a slight prospector strategy, whereas those do not use MA for decision-making have biggest Changes in the product portfolio, Technological changes, Changes in the information systems and Changes in the diversity of products. In order to verify if the differences were significant, the Mann-Whitney test was chosen, with the following Hypothesis: Ho: The distribution of variables of prospector strategy is the same across the categories of decision-making. Ha: The distribution of variables of prospector strategy is different across the categories of decision-making. H0 is not rejected. The prospector strategy is the same in the hotels that use MA for decision-making or not. So H7 is rejected.

In order to analyze the market orientation, taking into account the importance that is given to management accounting for decision-making, the mean of levels of market orientation was compared between the two groups. When the value is close to 7 it means that the hotel has a market orientation. The mean is equal to 4.61 when MA is used for decision-making, while the mean is equal to 4.8 when MA not for decision-making. The hotels in the sample present a market orientation, whereas those do not use MA for decision making have a biggest market orientation. In order to verify if the differences were significant, the Mann-Whitney test was chosen with the following Hypothesis: Ho: The distribution of market orientation is the same across the categories of decision-making. Ha: The distribution of market orientation is different across the categories of decision-making. H0 is rejected. The market orientation is the same in the hotels that use MA for decision-making or not. So H8 is rejected.

## CONCLUSIONS

There is a relationship between the management accounting (MA) and the hotels management, as well as there are several MA techniques that are very important for the managers. It is important the use of MA information to allow the optimization of the decision-making processes, due to the fact of them facing different kinds of competition and environments of uncertainty. The MA techniques used frequently in the hotels studied are

Budgeting, Budget Deviation Analysis and Strategic planning. This corroborates with several authors cited in the literature. MA techniques are used in Portuguese hotels especially for decision-making and the budgeting process. However, there are other MA purposes considered very important for Portuguese hoteliers like elaboration of income and loss statement, support management information systems, estimate cost of products/services and calculate gross margin per product/service. Taking into account if the information supplied by management accounting would be adequate to several management functions, Support the decision process and Estimate cost of products/services had more adequacies. There was not adequacy for evaluation of human resources. It was tested if the use of the MA techniques changes according to the MA purpose chosen. In general, according to the tests done, there are not significant differences. Despite the fact that for some MA purposes significant differences occur - in other words, when Support management information systems is chosen, there are some differences of use in Budgeting, Budget Deviation Analysis, Product Profitability techniques, Tableau de Bord, Return on Investment and Benchmarking. In hotels which have chosen this purpose, there is a greater use of these techniques. However, the situation will be different if the kinds of decisions realized by the hoteliers are analyzed - if the hotel managers only make decisions after consulting their subordinates, there are significant differences. This kind of decision uses more MA techniques (Budgeting, Budget Deviation Analysis, Product Life Cycle Costing and Activity based budgeting). It is important to refer that when the decision is made at the operational management level the use of MA techniques is higher.

Several hypotheses were tested for finding determinants that influence the use of MA techniques for decision-making, such as competition, environment surround by uncertainty, decentralization of the decisions, prospector strategy and market orientation. Based on Mann-Whitney test, there is not relationship between these determinants and the use of MA techniques for the decision-making. Thus, it was confirmed that there is not a strong relationship between level of competition and the use of MA techniques, an idea previously transmitted by Mia & Patiar (2001). It was also confirmed that the uncertainty of a task does not imply the use of MA, an idea already mentioned by William & Seaman (2002) and Veecken and Wouters (2002). There is not an agreement with Cadez & Guilding (2008) in respect to the relationship between prospector strategy and market orientation with the use of MA for decision-making.

In conclusion, when the decision is made with the help of the subordinates, there is a greater use of MA techniques. This corroborates with the idea of Aver & Cadez (2009), Brewer et al. (2013) & Zare et al. (2013), the utility of MA it is not only for managers but for all the employees of the organization.

## **MANAGERIAL IMPLICATIONS**

It is clear from this investigation that management accounting is very important to hoteliers, because it is a source of information for their decision-making, budgeting process and support management information systems. The hotel managers must optimize the process by choosing MA techniques according to the employees that will use them. When the decision is made with the help of the subordinates, there is a greater use of MA techniques.

## **LIMITATIONS AND FUTURE RESEARCH**

This study was done for three years, so our answers are not in the same cyclical period. It was studied a few determinants, but according with the contingency theory there are more factors that can influence the management accounting techniques. There is an opportunity of analyzing in more details these findings in future research projects and extended this research to others countries. This study could also help academic institutions to define their research orientation.

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# **EVE: AN AFFECT-SENSITIVE PEDAGOGICAL AGENT**

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## **ABSTRACT**

*Easy with Eve is an affect-sensitive tutoring system that features Eve, an animated pedagogical agent that adapts to student emotion based on the results of an observational study of human tutors. This paper presents the methodology and results of a study of the effectiveness of Eve, showing evidence that facial expression detection may have enhanced the effect of the presence of Eve on student motivation and beliefs about how much they were able to learn by interacting with the tutoring system, and suggesting areas of improvement to enhance the effectiveness of this system in business training and other context.*

**Keywords:** computer based learning, affective systems, human factors, intelligent tutoring systems.

## **INTRODUCTION**

One of the established strengths of human tutors is their ability to adapt to the affective and motivational states of the students (Lepper, Aspinwall, Mumme & Chabay, 1990; Fox, 1991; Merrill, Reiser, Ranney & Trafton, 1992; Sarrafzadeh, Alexander, Dadgostar, Fan & Bigdeli, 2006). For this reason, many researchers feel strongly that Intelligent Tutoring Systems (ITSs) would be significantly enhanced if computers adapted according to the emotions of students (Picard, 1997; Kort, Reilly & Picard, 2001; Alexander, Sarrafzadeh & Hill, 2008]. This idea has spawned the developing field of Affective Tutoring Systems (ATSs): ATSs are ITSs that are able to adapt to the affective state of students in the same ways that effective human tutors do (Alexander et al, 2008; de Vicente, 2003). ATSs have a very short history: it seems that the term “Affective Tutoring System” was first used just a decade ago (de Vicente, 2003), although the popular concept of an ITS adapting to perceived emotion can be traced back at least as far as Rosalind Picard’s book *Affective Computing* (Picard, 1997). However, the field of ATSs is sufficiently young that up until now, few fully functional ATS’s has yet been implemented, although much research has focused on tutoring systems that can detect student emotions (D’Mello, Picard & Graesser, 2007; Litman & Forbes-Riley, 2006) or can display simulated emotions through an animated pedagogical agent (Johnson, Rickel & Lester, 2000; Predinger & Ishizuka, 2004).

There have been some results that suggest that student affect is related to cognitive performance. In a meta-study of affective states associated with the use of learning technologies, such as intelligent tutoring systems, it was found that engagement or flow, boredom, confusion, curiosity, happiness, and frustration do appear frequently during the use of affective learning technologies (D'Mello, 2013). This suggests that "...the enhanced interactivity, personalized instruction, rapid feedback, and other features of ALTs have the intended effect of engaging students." (D'Mello, 2013, p. 1093). This is encouraging, since it implies that affect may provide useful clues into the student's emotional state, if affect can be accurately detected and integrated into a student model as a part of an adaptive strategy for learning systems. Still, very little research has focused on the question of how an ATS should adapt in real-time to student displays of emotion.

In response to this shortcoming, the current research has explored the pioneering development of an ATS that bases its tutoring strategies on the tutoring actions of real human tutors. As previously described in Sarrafzadeh, Hosseini, Fan & Overmyer (2003), an observational study of human tutors interacting with students has been carried out, on the basis of which a novel, fuzzy, case-based method for affective tutoring strategies has been developed (Alexander & Sarrafzadeh, 2004). In an attempt to validate the feasibility of an emotion-sensitive tutoring system, this tutoring strategies method has been implemented in a system for tutoring counting and addition for elementary students, Easy with Eve. Easy with Eve features an affect-sensitive animated pedagogical agent, Eve (Alexander, Sarrafzadeh & Hill, 2006), that is able to detect student affect using a real-time facial expression analysis system, which was developed in-house (Sarrafzadeh, Alexander, Dagdostar, Fan & Bigdeli, 2006).

In this paper the methodology and results are presented of a study using Easy with Eve that was carried out to test both the effectiveness of adding emotion detection to the tutoring strategies module and the impact of the presence of the animated pedagogical agent. The following section briefly discusses the implementation of Easy with Eve, after which the methodology and results of the study are presented. The paper concludes with a short discussion of the findings from this study, and some suggestions for future work.

## **EASY WITH EVE**

### **Domain**

Easy with Eve is an ATS that is designed to help primary school students with the concept of part-whole addition; the domain is based on a previously existing exercise developed by the New Zealand Numeracy Project (New Zealand Ministry of Education, 2003). In this exercise, students learn to add two numbers together by transforming the initial equation so that the first addend is made up to the next 10: for example,  $14 + 8$  would become  $14 + 6$  (to make 20)  $+ 2 = 22$ . Students learn this reasoning by manipulating tens frames and counters. As students progress through the exercise the tasks become increasingly abstract, until by the end of the exercise students must apply the principle of part-whole addition to equations without using the tens frames and counters at all.

### **Detecting Emotions**

Emotion detection in the ATS is achieved using a real time facial expression analysis system developed in-house (Overmyer, Hosseini, Fan, & Sarrafzadeh, 2003). The emotion classification is achieved by using support vector machines, and is able to detect 8 different facial expressions: neutral, smiling, laughing, surprised, angry, fearful, sad and disgusted. Unlike other facial expression analysis systems, facial information is automatically detected without the need to manually mark facial features. Initial tests on artificial data sets (using computer generated faces) have yielded a successful recognition rate of approximately 90% (Sarrafzadeh et al, 2006).

### **Displaying Emotions**

Easy with Eve is able to display the simulated emotions of a human tutor through an animated pedagogical agent, Eve, who is shown in Figure 1. Animated characters have been shown to carry a persona

effect, which is that the presence of a lifelike character can influence students to perceive their learning experiences more positively (Clark & Choi, 2005). The persona effect (van Mulken, Andre & Muller, 1998) has been shown to increase learner motivation, especially in technical domains, although its overall benefits are unclear (Clark & Choi, 2005).

Eve is able to display a range of emotions through facial expressions; she is also able to deliver spoken teaching content. Her repertoire of tutoring actions includes giving positive or neutral feedback, asking questions, discussing problems or solutions, giving hints, or answering her own questions.

## **Adapting to Emotions**

The tutoring actions of Eve are generated by a novel fuzzy case-based tutoring strategies module, discussed in detail in Alexander & Sarrafzadeh (2004). The system searches for close matches to the current tutoring scenario in data that was collected from an observational study of human tutoring interactions, presented in Sarrafzadeh et al., (2003). The primary reason for adopting this approach to tutoring strategies in the ATS was due to the absence in the literature of studies explaining how human tutors adapt to student emotions on a low-level, turn-by-turn basis; this would have made any form of rule-based approach problematic.

# **METHODOLOGY**

## **Goals**

Easy with Eve was user-tested at two local primary schools in Auckland to investigate its impact on student performance, motivation and perceptions of the tutoring experience. In particular, these goals can be summarised as follows:

- To find out whether or not emotion detection would improve student performance.
- To find out whether or not emotion detection would affect student perceptions of the ATS.
- To find out whether or not the presence of Eve would improve student performance.

## **Participants**

As can be seen from the list of goals, the two independent variables in the study were firstly whether or not the ATS adapted to student emotion (i.e. student facial expressions) as well as student answers, and secondly whether or not the animated tutoring character (Eve) was present. The first independent variable, whether or not the system detected student emotion, was of particular interest as existing ITSs adapt only to student answers.

Therefore, a 2x2 between-subjects experimental design was chosen for this study. There were four different versions of the tutoring system:

- where the animated agent was present and facial expressions were detected (as a measure of student emotion to be used by the tutoring strategies module);
- where the animated agent was not present (text-based feedback was used) but facial expressions were detected;
- where the animated agent was present but facial expressions were not detected; and
- where neither the animated agent was present nor facial expressions detected.

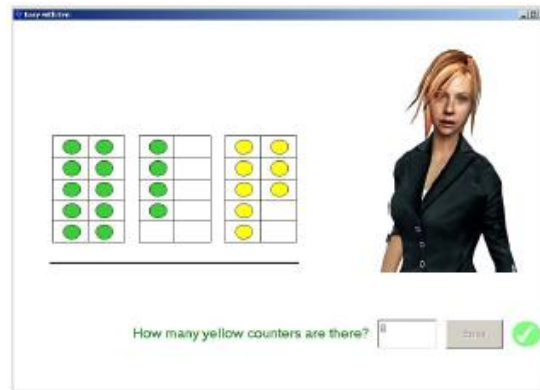
In total, there were 62 participants in the study, 30 males and 32 females. The participants were all 8-9 year old students at one of two local schools in Auckland; the students were exposed to different versions of the tutoring system. However, data from 3 of the students was unusable, leaving a total of 59 participants.

Each participant was told that the web-cam on the monitor (used by the facial expression recognition system) only worked half of the time – but the participants were not told whether their facial expressions were being detected or not. This was so that later on it could be seen how much of a difference the facial expression detection made to student perceptions about the tutoring system.

Ethical approval was sought and obtained from the Massey University Human Ethics Committee before the participants were contacted and the study carried out.

## Measures

There were two measures chosen to investigate the effects of the two independent variables: the first was a measure of student performance using a pre-test and a post-test, and the second was a questionnaire. This paper only focusses on the first measure which is the student performance and not the questionnaire.



**Figure 1: Screenshot of Easy with Eve**

### Pre- and Post-Tests

The aim of the pre- and post-tests was to determine whether or not students improved their counting and addition through using Easy with Eve, and to generate a measure of exactly how much students improved. The pre- and post-tests would also determine whether some groups improved significantly more or less than others.

Both the pre- and post-tests were integrated into the ATS so that the entire pre-test, tutoring session, post-test sequence was introduced and explained by the tutoring system; the system also explained the transitions between the pre- and post-tests and the tutoring system proper. Where Eve was present, this was all explained to the student by Eve; otherwise it was explained by text.

The content of the tests was based on problems from each of the levels in Easy with Eve; each test was scored out of a maximum of 15. The questions in the pre- and post-tests were identical in style and difficulty, with the addends themselves being the only difference. The tests were designed to take about 5 to 7 minutes each.

## Procedure

The study was carried out on site at two local primary schools in Auckland, New Zealand, in a meeting room and a remedial teaching room respectively. Four computers were used in the testing, with each computer running a different version of Easy with Eve. The computers were arranged so that there would be a minimum of distraction from the other participants.

Each of the four computers was equipped with a web cam and a set of headphones, regardless of whether or not Eve was present or facial expressions were being detected on that version of the tutoring system. The aim of this was to make it possible to test whether or not students could tell whether or not their facial expressions were being detected based solely on the tutoring system's responses.

Up to four participants at a time were welcomed into the meeting/remedial teaching room, and given a brief overview of the pre-test, tutoring system and post-test; then participants began the pre-test.

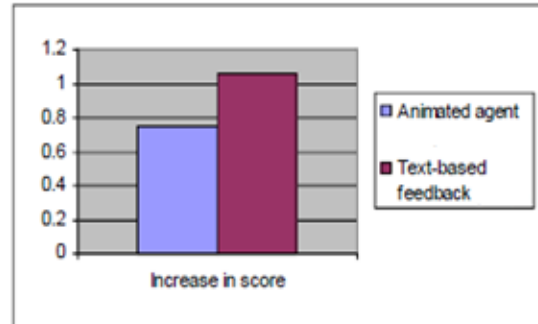
As participants completed the pre-test, the ATS introduced the next phase of the testing, which was the session with the tutoring system proper. This was designed to take approximately 18 to 20 minutes; participants began their last problem immediately after the first time that they completed a problem after 17 minutes had

elapsed. When participants had completed the tutoring session, they then began the post-test. The results of the pre- and post tests were written to a file.

## RESULTS

The data showed a significant overall increase in test scores between pre-tests and post-tests. As shown in Figure 2, there was an improvement from pre to post test. A 2 (presence of agent) x2 (facial expression input) x2 (pre-/post-test) mixed design ANOVA revealed a main effect of test. Post-test scores ( $M= 9.34$ ,  $SD= 2.23$ ) were significantly greater than pre-test scores ( $M= 8.42$ ,  $SD= 2.28$ ),  $F(1, 55) = 7.48$ ,  $p = 0.01$ .

**Figure 2: Increase from pre-test mean to post-test mean**



## DISCUSSION

The results from the study showed a statistically significant overall increase in student scores from pre-test to post-test. This result is certainly very encouraging, as it goes some considerable way towards validating the use of an affect-sensitive tutoring system as a tool to help students improve their learning.

## CONCLUSIONS AND FUTURE WORK

The work presented in this paper has demonstrated the feasibility of developing an Affective Tutoring System that adapts to student emotion based on a case-based approach to human tutor-based tutoring strategies. The results of the study showed a significant overall increase in test scores between pre-tests and post-tests. There was also evidence in favour of persona effect of Eve. This suggests that further work to this agent would be valuable and improvements could further enhance the student learning and level of the persona effect.

There is some evidence that participants have more confidence in an agent represented as a young female peer, rather than an older teacher (Jordine, Wilson & Sakpal, 2013). For future versions of Eve, it could be appropriate for the user to have the opportunity to choose an avatar with which they are most comfortable. As a part of future work, a range of avatars will be made available for learners to choose from depending on age and the context of the learning.

Future work should also investigate whether the tutoring strategies module can be improved by extending the observational study of human tutors upon which it is based; the accuracy of the facial expression detection with real images should also be verified, and the overall study of the effectiveness of Easy with Eve should be repeated with a larger sample size to test for substantial effects. It would also be useful to repeat the study in different contexts (such as in training of employees) as if this Affective Tutoring System was to be used in contexts outside the pre-higher education sector it would be useful to determine the effectiveness in a variety of contexts including social science and business education contexts. It is particularly valuable to assess the effectiveness of ATs in business and sales education and training where emotion might play a more substantial role than areas such as mathematics education.

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# **IMPROVED LEARNING THROUGH PEER TUTORING IN A DECLARATIVE PROGRAMMING COURSE**

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**Scott Overmyer**  
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## **ABSTRACT**

*A method of peer tutoring was used and evaluated in an introductory programming course in Haskell. Students were paired on the basis of skill level with pairings opposite those suggested by the existing literature. This method of peer tutoring was shown to be effective in increasing the performance of both high- and low-skilled students in learning a declarative language. This method of peer tutoring can be applied to business and other technology education.*

*Keywords:* Peer tutoring, programming, education, peer learning, improved student performance

## **INTRODUCTION**

Peer tutoring is defined as “a system of instruction in which learners help each other and learn by teaching”, (Goodlad & Hirst, 1989, p. 13). In other words, people of nearly equal states of knowledge teach each other. Peer tutoring takes on a number of forms and is used in a wide variety of disciplines at all levels of education. The authors wanted to know how effective peer learning is in computer science education, since both the efficacy and cost saving potential could contribute to more effective and less expensive computer science education, and since there is a paucity of research on peer tutoring in IT and business higher education.

## **PEER TUTORING**

Peer learning is expected to have a number of benefits, including better involvement with the material, a stronger level of individual identity as a member of the group of computer science students, prepare students for the group projects that will inevitably come, and expose them to different learning styles and modes of study and problem solving (Wills, Finkel, Gennert & Ward, 1994). These benefits, however, will have to be empirically demonstrated through rigorous, applied research.

Research has also suggested that most novice programmers require special attention and help with programming (Emurian, 2007) and that pairs programming provides novices with a number of benefits in learning languages suggestive of the involvement of some kind of peer tutoring activity during pairs programming (Salleh, Mendes & Grundy, 2011). These benefits extended to general knowledge transfer among pairs, leading us to believe that learning is extended to non-coding tasks as well. In addition, students preferred to pair with students with similar abilities and skills as themselves, suggesting that “peer” tutoring may be

preferred over expert tutoring, where students and teaching assistants or tutors possess significantly differential skill levels (Salleh et al, 2011).

As mentioned in the introduction, peer tutoring has been shown to be an effective method in a variety of educational disciplines. Unfortunately, however, there is very little research on the use of peer tutoring in higher education in business and technology. Peer tutoring has considerable research foundation in K-12 education and , “As one of many teaching techniques available to teach IT, WCPT (peer tutoring) deserves research attention as it applies to IT education.” (Cold & Hickman, 2007, p. 51]. Among studies that do exist, one found positive effects on “grade point average, performance rate, success rate and learning strategies and, also, statistically significant pre-post differences for the tutors on learning strategies and social skills.” (Arco-Tirado, Fernandez-Martin & Fernandes-Balboa, 2011, p. 773).

Additionally, and very importantly for teaching programming and other IT problem-solving skills is the improvement of student’s use of metacognitive knowledge (i.e., the degree to which problem solving infrastructure, such as rules, is instantiated in the student’s thinking). In a study of student problem solving ... it was determined that peer tutoring had a significant positive effect on the students’ level of metacognitive regulation, specifically orienting and planning (De Backer, Van Keer & Valcke, 2012). Metacognitive orienting refers to student’s preparation for problem solving by examining goals, task demands, and availing themselves of prior knowledge required solving the problem at hand. “At posttest, students demonstrate significantly more frequent and more varied use of metacognitive regulation, especially during the orientation, monitoring, and evaluation phases. Furthermore, our findings point to an increase in more profound and higher-quality strategy use at posttest.” (De Backer et al, 2012, p. 559). This shift in strategy may prove very important in teaching a variety of problem solving skills in IT.

In summary, although research in the use of peer learning in higher education is somewhat sparse, we found that the peer learning literature provides ample evidence to suggest that this is a research avenue worth pursuing.

## **HASKELL PEER LEARNING**

In order to measure the effect of peer learning on the learning of programming languages in computer science education, an experiment was conducted to assist in identification of misconceptions in students’ understanding of programming in order to improve the teaching of the course. The second goal was to measure the improvement in student learning through peer learning. Haskell was chosen partly because some of the authors are involved in the teaching of Haskell, but also because there are clear and distinct concepts in Haskell over which students with a couple of years’ experience in more typical languages tend to stumble.

No attempt has been made to determine whether a different set of conceptual blocks would be involved with first time programmers learning Haskell. Most likely orthodox procedural programming is in some ways antagonistic to learning pure functional programming, but this is not the subject of this experiment. The central concern is whether peer learning facilitates the assimilation of Haskell. It is also supposed that most students doing computer science courses will have some interest in orthodox procedural languages, so, at least at tertiary level in computer science, the pristine student may be mythological.

The degree of mathematical sophistication of the students may also affect the learning of Haskell, but it is hard to know exactly how. Some of the concepts can be demonstrated cleanly in Category theory, but students too steeped in maths without experience in programming have at least as much unlearning to do as those coming from procedural languages. The problem here is typically one of program resource usage. However, most of our programming students are not mathematically sophisticated, and it is not our intention in these courses to teach Haskell in that manner. Thus the emphasis is on Haskell as a programming language of a fairly conventional nature, but with some quirks in the syntax and semantics.

## **BACKGROUND**

The experiment was initially done in a class of 93 students taking declarative programming course in the second academic Semester (offered twice a year at the Albany campus). The course was also offered at the Palmerston North (PN) campus.

Students have historically had difficulty mastering the concepts covered in the course, especially recursion, which forms a substantial portion of the course. Sets of exercises relevant to each concept were given to pairs of students. Pairs were selected based on an exam given at the end of the fourth week of the semester. The literature led us to expect that pairings should be done based on similarities in test scores, however, with this population, the pair consisted of a student who had done well in the exam and one who had had difficulty. We believe that this differential skill level would be more effective with this particular programming paradigm, and that having students of similar knowledge and skills would be either a waste of time (for expert students) or fruitless (for those without baseline Haskell skills). The experiment was aimed at measuring the effect of peer learning and identification of student misconceptions. This paper focuses on the effect of the peer learning experience on the participants learning outcomes.

## The Experiment

Based on the results of a midterm test and assignments given to students in the first half of the semester, pairs of students were selected. Each pair consisted of a student having problems with understanding the concepts (called student A hereafter) and one who had proved mastery with the concept of interest (called student B hereafter). Each set of exercises were used by the pair in the following way:

1. The following steps were repeated for each set of exercises:
  - (a) The exercises were given to student A by student B
  - (b) Student A solved the problems and student A prepared a report on student A's misconceptions along with the solutions given by A
  - (c) Student B then went through each of the exercises with student A trying to help them with the points A had missed
  - (d) The same set of exercises was given to A to be solved
  - (e) Student B prepared another report on the second solution.
2. Progress of participating pairs was measured by looking at their test and final exam marks. A comparison was also made with the previous term results.
3. The exercises were published as a workbook along with a textbook. The book was bundled with a multimedia intelligent tutor.

## STATISTICAL RESULTS

### Data Overview

A cohort of eighty-two (82) students completed the Declarative Programming course (159.202) at Massey University's Albany Campus in the second semester, of the 93 that had initially enrolled. From this population, 80 had useable data. Following the mid-term test on Haskell programming good students were paired with under-performing students in the peer tutelage programme. A good student was defined as such on the basis of a score not less than 19/30 (63.3%) on the mid-term test. Those receiving a test score less than the threshold were categorised as under-performing. Participation in the programme was determined by the submission of a paired project between a good student and under-performing student. Of the 80 students for whom valid data was available, 42 participated and 38 did not.

As a further indication of the impact that the peer tutoring programme had on student learning, data from the same course run in the first semester of that year was used as a comparison. Suitable data was available from 61 students of the 66 that completed the course in semester 1. This was from an initial class roll of 75. For consistency, student status was classified using the same threshold as that used in the second semester.

The final exam, worth 50% of the student's final mark, had a Haskell component that constituted 28% of the exam and a Prolog component contributing the other 72%.

In order to remove the within-student independence, which is due to the intrinsic properties of the individual student, paired difference data is examined. That is the data obtained from the mid-semester test – collected before the peer tutelage programme commenced – is subtracted from the final mark of the assessment of interest (Haskell or Prolog) obtained after participation for each student. The marks for each type of assessment were converted to a percentage (100%) prior to manipulation enabling relative comparisons. This produced two variables for analyses. Comparisons to the final exam mark are redundant as any influences in the final exam are expressed in the undiluted performance from either the Prolog or Haskell part of the exam.

From a statistical perspective, the data meets the traditional distributional assumptions necessary for parametric inference, namely normality and constant variance. Evidence of this is provided where necessary. The sample size is considered sufficient given the strong fit to the normal distribution. Given that the data is from formal assessment (test and exam) it can be assumed that apart from the influence of the peer tutelage programme results between-student responses are independent. The subtraction of the mid-semester test mark from the relevant exam component negates the within-student dependence.

Prior to commencing an analysis to examine the effect of participation upon final marks, a chi-square test of independence was performed to see if student status (good, under-performing) affected participation in the peer tutelage project of semester two. Under the null hypothesis of independence a p-value of 0.256 was obtained demonstrating that student status did not significantly affect participation. Additionally, a Z-test for differences in proportions indicated no significant difference in the non-completion rates between semesters ( $p=0.973$ ).

## Methods

Four analyses were performed. The first two were one-way ANOVA to explore the direct impact of student involvement in the peer tutelage programme during the second semester. Where the parametric assumptions failed, a Kruskal-Wallis test was applied. The final two analyses use a general linear model to explore the impact of student involvement whilst incorporating a semester effect. A 5% level of significance is adopted for this study. Normality was tested using Anderson-Darling's method. Where there are only two levels under consideration, an F-test for normal data was used to test equal variances. Bartlett's test for normal data was used to test for equal variances when there were more than two levels.

## Results

Figure 1 shows the impact of the peer tutelage programme upon the relative performance in the exam. Clearly those that participated in the programme performed relatively better in the Haskell component of the exam than their peers.

On average the participants of the programme, with a mean difference of 5.38, performed significantly better ( $p=0.002$ ) in the Haskell component of the exam than did the non-participants with a mean difference of – 6.24. The approximately normal data ( $p = 0.916$  (participants), 0.462 (non-participants)) had equivalent variances ( $p = 0.08$ ) which are represented by a standard deviation of 18.17 for participants and 13.64 for non-participants.

The relative performance in the Prolog component of the exam, which was not directly involved in the peer tutelage project, is displayed in Figure 2 by level of participation. There is no clear distinction between these two groups. No significant difference exists ( $p=0.532$ ) in the relative performance of the Prolog component of the exam. The data was approximately normal for both the participants ( $\sim N(-15.63, 19.30^2)$   $p=(0.523)$ ) and the non-participants ( $\sim N(-12.99, 18.29^2)$  ( $p=0.597$ )).

The students from the second semester cohort were broken into four categories; non-participating under-performing students (US NP), non-participating good students (GS NP), participating under-performing students (US P) and participating good students (GS P) to see which group benefited the most from involvement in the programme.

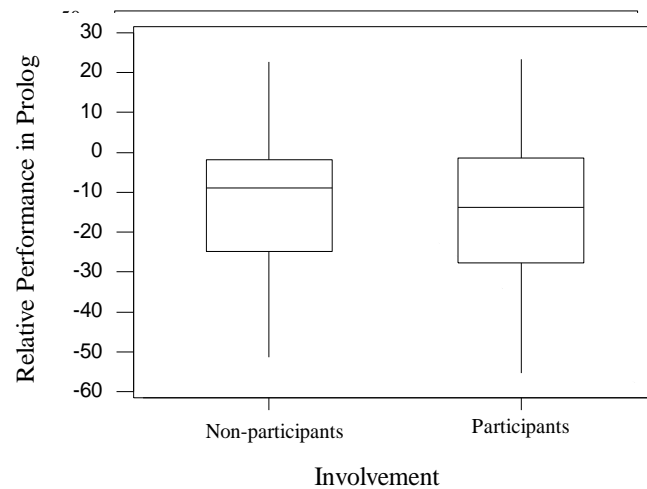
**TABLE 1. PROPERTIES OF THE RELATIVE HASKELL MIDTERM DATA FROM THE SECOND SEMESTER**

Level	n	Mean	Standard Deviation	Test for ~N (p)
UP NP	21	-1.39	12.45	0.624
G NP	17	-12.24	12.94	0.697
UP P	20	11.74	22.21	0.832
G P	22	-0.40	11.15	0.399

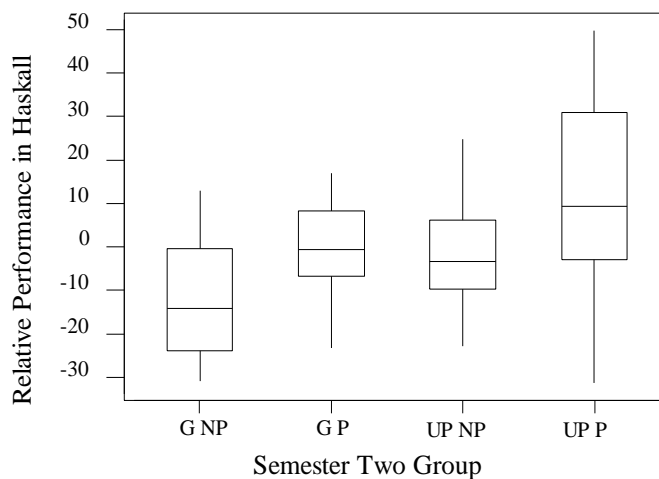
There is a significant difference between the mean relative performances of the groups. The data is approximately normal, as shown by the p-values from the Anderson-Darling normality test in Table 1. However, the variances are not equivalent ( $p=0.006$ ). A Kruskal-Wallis test reinforces the previous result that there is a significant difference between groups ( $p=0.001$ ).

**Figure 1. Boxplot for Relative Performance in Haskell by Level of Participation**

**FIGURE 2. BOXPLOT FOR RELATIVE PERFORMANCE IN PROLOG BY LEVEL OF PARTICIPATION**



**Figure 3. Boxplot for Relative Performance in Haskell by Group**



A general linear model (GLM) was used to explore the impact of participation while accounting for a semester effect. As semester one did not have a peer tutoring programme running, this cohort provides a

benchmark to evaluate the relative performance in Haskell and determine if there was any undue influence (deliberate or accidental) affecting performance.

The general linear model adopted is of the form:

$$E(y) = \mu + Se + In + St + In \times St,$$

where  $E(y)$  is the relative performance in the exam portion of interest,  $\mu$  is the constant of the process (overall mean relative difference), 'Se' is the semester effect(one/two), 'In' is the involvement effect (participant/non-participant), 'St' is the status of the student (good/under-performing) and 'In  $\times$  St' is the interaction between involvement and student status.

To employ the GLM successfully we assume that the data for the different levels of each variable is approximately normal with equivalent variance. This is the case as shown in Tables 2 and 3.

The general linear model for the relative performance on Haskell has two significant terms, involvement ( $p=0.001$ ) and status ( $p=0.001$ ), as shown in Table 4. All other terms are deemed insignificant, that is the coefficients are not significantly different from zero. The residuals were approximately normal (0.00, 19.24<sup>2</sup>) ( $p=0.114$ ) and exhibit homogeneity of variance and no correlation when plotted against the fitted values.

The second general liner model examining the influences upon the relative performance on Prolog has only one significant term (excluding the constant), a semester effect (0.005). The residuals were approximately normal (0.00, 15.75<sup>2</sup>) ( $p=0.357$ ) and exhibit homogeneity of variance and no correlation when plotted against the fitted values.

**TABLE 2. PROPERTIES OF THE RELATIVE HASKALL - MIDTERM DATA FROM BOTH SEMESTERS**

Variable	Level	Mean	Standard Deviation	n	Test for ~N (p)	Constant Variance (p)
Semester	1	-11.08	17.04	61	0.388	0.986
	2	-0.14	17.10	80	0.140	
Involvement	NP	-9.22	15.93	99	0.490	0.294
	P	5.38	18.16	42	0.246	
Status	G	-9.37	15.79	71	0.907	0.151
	UP	-0.30	18.78	70	0.065	

**TABLE 3. PROPERTIES OF THE RELATIVE PROLOG-MIDTERM DATA FROM BOTH SEMESTERS**

Variable	Level	Mean	Standard Deviation	n	Test for ~N (p)	Constant Variance (p)
Semester	1	-1.94	20.99	61	0.624	0.346
	2	-14.38	18.75	80	0.245	
Involvement	NP	-6.18	20.62	99	0.964	0.645
	P	-15.64	19.30	42	0.596	
Status	G	-12.80	20.71	71	0.447	0.757
	UP	-5.15	19.95	70	0.914	

**Table 4. GLM results for the difference between Haskell exam percentage and midterm test percentage per student**

Source	Associated Level	Coefficient	S.E. Coefficient	P-Value
Constant		-2.604	1.604	0.107
Semester	1	-2.108	1.656	0.205
Involvement	NP	-6.168	1.792	0.001
Status	G	-5.027	1.474	0.001

<i>Involvement</i> × <i>Status</i>	NP×G	1.038	1.474	0.482
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**Table 5. GLM results for the difference between Prolog exam and midterm test percentage per student**

Source	Associated Level	Coefficient	S.E. Coefficient	P-Value
<b>Constant</b>		-2.604	1.604	0.000
<i>Semester</i>	1	-2.108	1.656	0.005
<i>Involvement</i>	NP	-6.168	1.792	0.643
<i>Status</i>	G	-5.027	1.474	0.025
<i>Involvement</i> × <i>Status</i>	NP×G	1.038	1.474	0.933

## Discussion

There is significant evidence that the peer tutelage programme is beneficial to those who participate. The results from the ANOVA support this as there is a significant difference in the relative performance on the Haskell component of the exam by level of involvement, but there was no significant distinction in the Prolog component.

In the second semester, the under-performing participating students benefit the most from involvement in the programme, improving on average by 11.74% on the mid-term percentage in the Haskell part of the exam compared to their peers. Under-performing students who did not participate continued on average to underperform. That is the mean (−1.39) for this group indicates no significant relative improvement had been made. A similar situation applied to the good students who participated. On average they made no significant gains (−0.40). However, this signifies that on average they remained “good students”. Collectively, the good students who did not participate fared comparatively worse with respect to their peers. This group’s relative performance (−12.24) in the Haskell component of the exam was significantly worse than that in the mid-term.

The general linear model that considers both semesters reinforces the results from the second semester. The first model for the relative performance in the Haskell part of the exam has two significant variables, student status and participation.

Importantly, participation results in a relative increase of 6.2% over non-participants. Additionally, under-performing students benefit by 5% more than the good students do. As the interaction between student status and project participation is not significant the benefits of the peer tutelage programme are equivalent for good and under-performing students.

Further, because the semester effect is not significant, this indicates that the peer tutelage programme has significant benefits to those who participated and these benefits were not caused by an increased emphasis in teaching Haskell or changes in teaching this part of the course between semesters.

The second general linear model, which examined relative performance in Prolog, also supports the previous findings. Participation is not significant in this model ( $p=0.643$ ), suggesting that relative improvements in Haskell were a result of the peer tutelage programme. Whilst students in the first semester performed relatively better on the Prolog component of the course, this is not due to the peer tutelage programme, but due to any number of unknown causes such as the difficulty of the exam questions, delivery of material and so forth. This semester effect would only have been important if involvement had also been significant in this model. This would have implied that students or staff in the tutelage programme had placed more emphasis on Haskell to the detriment of learning Prolog.

The results from the two semesters of the Declarative Programming course at Massey University’s Albany Campus show conclusively that the peer tutelage programme was beneficial to the participants’ relative performance in the Haskell component of the exam.



# CONCLUSION

Overall, our experiment shows that peer tutoring can be beneficial to teaching programming, as was our expectation and hypothesis. What is slightly counterintuitive is the notion that peers of differential skill and knowledge can be effectively paired in certain circumstances. We did not expect this effect based on our expectations from the literature, which suggests that pairs of like ability result in both the preferred pairings, as well as the most effective pairings form a peer tutoring standpoint (Salleh et al, 2011; Han et al, 2010; Sklar et al, 2006). As it turned out, the interaction between student status and project participation is not significant, suggesting that the benefits of the peer tutelage programme are equivalent for good and under-performing students using a reciprocal pair tutoring (RPT) paradigm.

Based on both our experiments and the literature, we can make the following recommendations:

- 1) Peer tutoring should follow a paradigm, and should have a method in place for best effect.
- 2) Peer tutoring was used after initial learning, to determine the knowledge and skill differential between students. This timing is supported in the literature and is it suggested that peer tutoring best serves students for whom traditional learning has not been maximally successful (Diosos-Henson, 2012).
- 3) In addition to learning the Haskell language, students were also observed to have learned other skills such as communication, collaboration, planning and other related IT problem solving skills.
- 4) Students performed well in a RPT paradigm in our study, and we can recommend this paradigm as effective for both peers. This view is also supported in the literature (Dioso-Henson, 2012).

One next possible step is to repeat this study using a peer matching paradigm, in which students of equal skill levels are paired, and the data is compared to results from other studies, including the current study. This comparison would tell us if the matching paradigm employed is significant as suggested by the literature, or whether the matching paradigm might be task dependent.

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# KNOWLEDGE REPRESENTATION IN HEALTHCARE AND MEDICAL INFORMATICS: A CLINICAL TRIALS APPLICATION

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## ABSTRACT

*The healthcare sector is made up of many entities, such as pharmacies, hospitals, clinics, insurance companies, and researchers that have a vast amount of information to be encoded and shared. Over time, different institutions have developed divergent vocabularies, coding systems, and classification systems that have been used in particular domains. A major problem in medical informatics is to integrate these varied representations by extracting semantically similar concepts across multiple sources, along with their relationships. This is the issue addressed by the Unified Medical Language System (UMLS) of the U.S. National Library of Medicine. It is made up of several components, including the Metathesaurus, Semantic Network, among others. The linking of healthcare information, medical terms, drug names, and billing codes from various sources is critical in applications that involve data being shared across entities, for example, between a patient's doctor, pharmacy, and insurance company, or when treating a patient in a hospital with records from multiple clinics and testing sites. Our research exemplifies this type of linking, focusing on semantic integration of disparate sources of information to support patient-oriented clinical trial search and presentation.*

**Keywords:** healthcare informatics, medical informatics, clinical trials

## INTRODUCTION

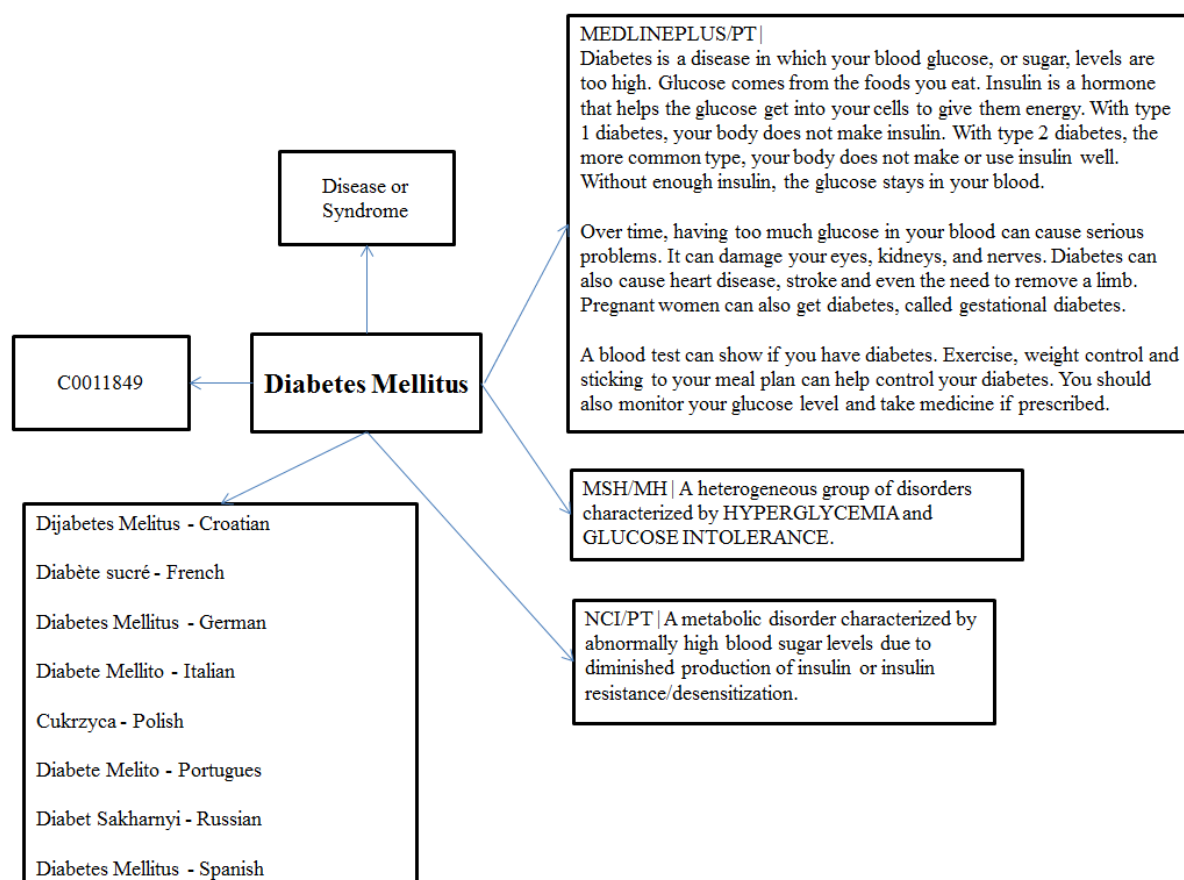
In the healthcare and medical field, as well as other fields, a variety of informatics solutions have been developed independently. For example, there are specialized vocabularies for clinical use, insurance purposes, radiology, pharmaceuticals, etc., as well as versions of these terminologies in different languages. The major goal of the Unified Medical Language System (UMLS) is to provide a platform that integrates the many diverse healthcare and biomedical terminology systems (U.S. National Library of Medicine, 2014) (Campbell et al, 1998). The need for a system like the UMLS arose out of the necessity for collaborative work among researchers and practitioners that need effective access to databases and resources developed by others. One of the values added by UMLS is that it addresses the challenge of recognizing equivalent or similar concepts that exist in various sources, resulting in many "mapping" relationships. This research area spans healthcare and biomedical informatics, as well as knowledge representation. The UMLS and its knowledge sources provide capabilities for software developers to implement systems to interpret meaning within healthcare and medical text information of many kinds, such as Electronic Health Records (EHRs), publications, public health data, clinical trials, etc.

## METATHESAURUS

The Metathesaurus component of UMLS is the extensive database of vocabularies that is centered on healthcare and biomedical concepts that are derived from a multitude of "source vocabularies", along with their instances / synonyms in the vocabularies and the relationships among these concepts. This interconnected database was created from the analysis and comparison of more than 150 vocabularies and coding systems, such as: thesauri

(MeSH), statistical classification (ICD-10), billing codes (CPT), clinical coding systems (SNOMED CT), healthcare informatics interoperability standards for data exchange (HL7), etc. These medical terminologies are used for coding (i.e. in EHRs), for data sharing, (i.e. HL7 messages), indexing health information, natural language processing, and further knowledge representations. Each concept is also assigned to a semantic type from the UMLS Semantic Network.

**Figure 1 – Diabetes Mellitus concept snapshot in Metathesaurus**

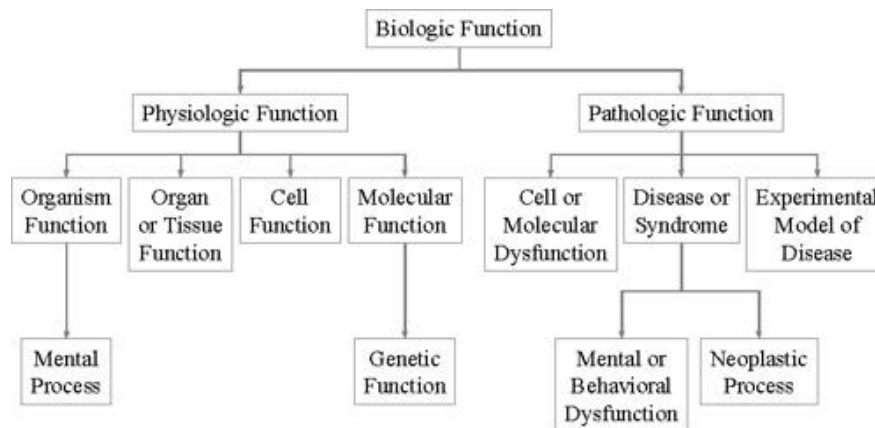


If we search for diabetes in the Metathesaurus, it returns hundreds of concepts that are related to the term diabetes, one of which is Diabetes Mellitus. The concept Diabetes Mellitus has many instances (called atoms) in the various source vocabularies. Figure 1 shows the Diabetes Mellitus concept, which has a concept unique identifier C0011849, a semantic type of “Disease or Syndrome”, along with many definitions from various vocabularies, and variations in different languages. There are also hierarchical and associative relationships with other concepts in the Metathesaurus.

## SEMANTIC NETWORK

Another component of the UMLS, the Semantic Network, provides more general semantic types that are used to categorize concepts of the Metathesaurus. The Semantic Network also contains hierarchical relationships, as well as other types of relationships, between the semantic types. Currently, the Semantic Network has 135 semantic types, along with 54 kinds of relationships. The relationships, which are the links between the semantic types, are also divided into different types. Sample semantic types are: Organism, Anatomical Structure, Physical Object, Clinical Drug, Chemical, Laboratory or Test Result, Diagnostic Procedure, Research Activity, etc. The hierarchy is divided into the categories of Entity (i.e. Gene or Genome, Vitamin ...) and Event (i.e. Laboratory Procedure, Pathologic Function ...). A portion of the hierarchical structure is shown in Figure 2. In addition to hierarchical relationships, such as Animal “is a” Organism; there are also non-hierarchical relationships, such as Therapeutic or Preventative Procedure “treats” Injury or Poisoning.

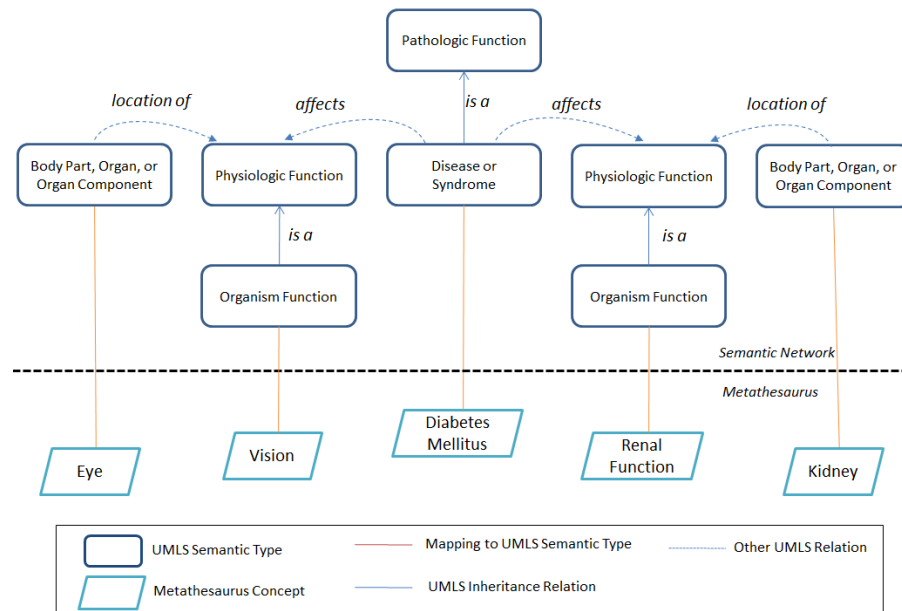
Figure 2 – Subset of semantic types within the UMLS Semantic Network (<http://www.nlm.nih.gov>)



## RELATIONSHIP BETWEEN SEMANTIC NETWORK AND THE METATHESAURUS

The mapping of concepts from the Metathesaurus to semantic types of the Semantic Network allows us to bring a set of concepts together into a common framework and possibly infer relationships among them. Figure 3 demonstrates an example where the Metathesaurus concept Diabetes Mellitus is mapped to the Semantic Network type “Disease or Syndrome”, which is a sub-type of “Pathologic Function”; it also affects “Physiologic Function”. By bringing the concepts of Eye, Vision, Kidney, and Renal Function into the network, which diabetes is known to affect, we can see how the Semantic Network enables us to meaningfully categorize their types and relationship with the disease. Of course, the concepts used need to have validated connections to generate a valuable network.

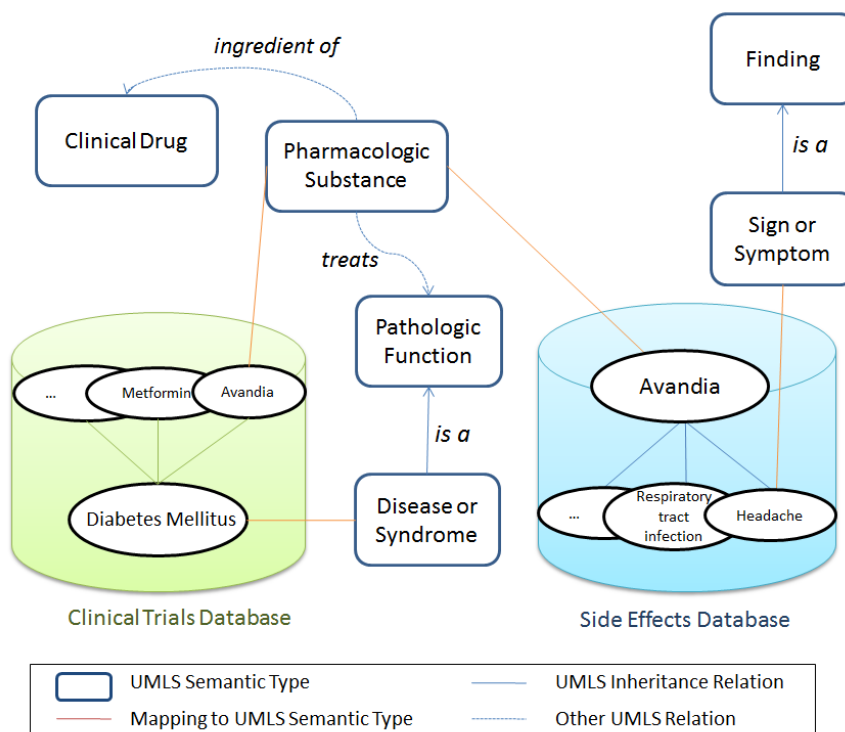
Figure 3 – Mapping of Metathesaurus concepts to Semantic Network types



# CLINICAL TRIALS AND DRUG SIDE EFFECT ANALYSIS

A particular focus of our research, along with our colleague S.A. Chun from the City University of New York, is on the design and implementation of a patient-oriented clinical trial search system that includes information on a patient's eligibility for clinical trials, as well as information on the side effects of drugs used in treatments (MacKellar et al, 2013). To do this, we incorporate clinical trial and side effect information from sources providing these resources as linked open data. The clinical trials housed at ClinicalTrials.gov are made available as linked data through the LinkedCT project (Hassanzadeh et al, 2009), which contains information on the trials, such as purpose, treatments, location, phase, eligibility criteria, etc. The side effect resource used is the SIDER dataset (Kuhn et al, 2010), which contains a searchable resource of drugs and known side effects. We use the UMLS Metathesaurus and Semantic Network to classify concepts within the system to provide the capability for semantically meaningful queries. The MetaMap program, part of UMLS, is a lexical tool that takes biomedical text as input and maps it to concepts in the UMLS Metathesaurus, as well as picks up concepts that are referred to in the text (Aronson, 2010). For example, the inclusion or exclusion criteria of a clinical trial, or treatment descriptions, etc. can be put into MetaMap to extract the relevant concepts. In the example shown in Figure 4, we continue with the example of diabetes, but here include clinical trial drugs and side effect information. The clinical trials database contains a set of interventions that are used for each condition. Some of the interventions involve treatment with a drug. For the condition "Diabetes Mellitus", there are many clinical trials available, some with drugs such as Avandia or Metformin, among other types of treatments. Here, we show how the disease, drug, and possible side effects relate from the perspective of the Semantic Network.

**Figure 4 – Semantic Network view of clinical trials, drugs, and side effect information**



## CONCLUDING REMARKS

We reviewed the components of the UMLS, including the Metathesaurus and Semantic Network. There are many other important types of knowledge representation in the healthcare and medical informatics domain, such as Electronic Health Records (EHRs), HL7 messaging, biomedical ontologies, to name a few. Healthcare data is also being represented and shared via semantic web representations and technologies. Knowledge representation in healthcare and medicine is an ever-growing area of research with many areas of application; for our future

work, we plan on expanding our work in the area of clinical trial decision support using linked data. An issue facing researchers in this area is the availability and integration of updated drug and disease information as linked data.

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# **THE MODERATING ROLE OF CULTURE AND GENDER IN PREDICTING NATURE-BASED TOURISTS' EVALUATION OF EXPERIENCES: A CROSS-CULTURAL STUDY OF FRANCE AND TAIWAN**

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## **ABSTRACT**

*We explored the role of culture and gender in nature-based tourists' evaluation of travel experiences by means of a survey and related instruments administered to a sample of visitors to the Morvan Nature Park, France and the Yangmingshan National Park, Taiwan respectively. The findings suggest that visitors' experience realms, that is, education, entertainment, esthetics, and escapism, may be more predictive of their self-perceived experience outcomes, that is, pleasure, memorability, quality, and satisfaction, than their personal and travel characteristics. This effect may be more pronounced as a function of composites of cultural value and gender. Specifically, males in the more a society can be characterized as individualistic in nature, the greatest the role that tourists' experience may play in creating valuable experiences.*

*Keywords:* Gender, individualism/collectivism, nature-based tourism, tourist experience.

## **INTRODUCTION**

The main purpose of this study is to investigate the possible moderating effects of individualism/collectivism on the overall association among nature-based tourists' experiential components and their evaluations of the experiences across two countries with contrasting levels of individualism/collectivism. Furthermore, the relative value of all of the experiential components in creating their evaluation across outcomes will be clarified.

## **HYPOTHESIS AND FRAMEWORK**

For nature-based tourism, French male (i.e., from a culture of high individualism) tourists will show the strongest overall association between the experiential components (i.e., education, esthetics, entertainment, and escapism) and tourists' evaluation of experiences (i.e., pleasure, memorability, perceived quality, and satisfaction), followed by French female tourists or Taiwanese male (i.e., from a culture of low individualism) tourists and then Taiwanese male tourists. We posit that the overall association among experiential components



and nature-based tourists' evaluation of experiences will be moderated by the two factors we are interested in, namely individualism and gender.

## METHOD

### Procedure

We conducted a field survey in the Yangmingshan National Park (YMSNP) located in North Taiwan and the Morvan Nature Park located in France. Data were collected evenly from 790 tourists of these two destinations (48.7% male, 51.3% female). Interviewers working in pairs applied an on-site intercept and 'next-to-pass' approach to ask a voluntary respondent (18 years old or above) of each travel party for a personal interview immediately following the completion of his or her trip.

### Measures

We followed Oh and colleagues' (2007) measure of experiential components, which was developed based on Pine and Gilmore's (1998, 1999) realms of experience framework, to investigate the experience that visitors obtained from activities in the national park. To conform to the nature-based tourism setting, the subscales of the measure were adapted to assess how much (1 = strongly disagree; 7 = strongly agree) the visitors got involved with a specific realm of experience drawn from the tour. Sample items included the following: 'The experience has made me more knowledgeable' (4 items in total to measure educational experiences); 'I felt I played a different role here' (4 items in total to measure escapist experiences); 'I felt a real sense of harmony' (4 items in total to measure esthetic experiences); and 'Other people's activities were amusing to watch' (4 items in total to measure entertaining experiences). The visitors' NEP was measured with eight pro-NEP statements developed by Dunlap and colleagues (2000) on a 7-point strongly disagree–strongly agree scale; a sample item of which is 'We are approaching the limit of the number of people that the earth can support.' The visitors' pleasure was measured with three items suggested by Oh and colleagues (2007) on a 7-point not at all–very much scale with a minor adaptation; a sample item is 'How interesting was your visit to YMSNP (the Morvan Nature Park)?' Their potential memories of the event were measured with three items developed by Oh and colleagues (2007) on a 7-point strongly disagree–strongly agree scale with a minor adaptation; a sample item is 'I won't forget my experience of YMSNP (the Morvan Nature Park).'

## RESULTS

### Canonical Correlation Analyses

Table 1. Analysis of the first canonical functions for the experiential realms and tourists' evaluation  
N=790; France=395; Taiwan=395; CL = Canonical loadings; CCL = Cross canonical loadings. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

A series of canonical correlation analyses were used to examine the association between the predictor set of variables (i.e., tourists' experiential components) and the criterion set of variables (i.e., tourists' evaluation on experiences). Its results not only confirmed the relative contribution of each predictor to tourists' perceived outcomes by providing more evidence, but also the moderating effect of culture and gender on the predictors-evaluation association. As M1 shown in Table 1, we treated respondents' previous visit, party size, length, age, and residence as control variables and found that none of them correlated with adolescents' influence at an acceptable level (i.e., greater than  $\pm .30$ ) (Hair et al., 1998). Their slight effects on tourists' evaluation can be ignored, and they were therefore not included in our canonical models, which focused on the predictors being examined. As shown in Table 1, all of the first canonical functions that produced the highest canonical correlations were significant ( $p < .001$ ) in the overall sample (M2, Wilks'  $\lambda = .499$ ), the French male group (M2a, Wilks'  $\lambda = .341$ ), the French female group (M2b, Wilks'  $\lambda = .449$ ), the Taiwanese male group (M2c, Wilks'  $\lambda = .515$ ), and the Taiwanese female group (M2d, Wilks'  $\lambda = .497$ ). In addition, the

redundancy index for the tourist evaluation variate is higher than that for the experience variate, supporting the predicting role of experience on tourists' evaluation of the experiences.

	<b>M1</b> Total (n = 790)	<b>M2</b> Total (n = 790)	<b>M2a</b> French male (n = 189)	<b>M2b</b> French female (n = 206)	<b>M2c</b> Taiwanese male (n = 196)	<b>M2d</b> Taiwanese female (n = 199)
	CL (CCL)	CL (CCL)	CL (CCL)	CL (CCL)	CL (CCL)	CL (CCL)
<b>Experiential realms</b>	-.799 (-.548)	-.809 (-.682)	-.837 (-.648)	-.906 (-.632)	.771 (.522)	-.691 (-.462)
Education	-.844 (-.579)	-.857 (-.723)	-.934 (-.723)	-.885 (-.618)	.763 (.517)	.462
Esthetics	-.681 (-.467)	-.691 (-.583)	-.678 (-.525)	-.692 (-.483)	.755 (.511)	-.489 (-.327)
Entertainment	-.602 (-.413)	-.612 (-.516)	-.385 (-.298)	-.346 (-.242)	.653 (.442)	-.423 (-.283)
Escapism						.283
<b>Confounders</b>	.074 (.051)					-.919 (-.615)
Previous visit	-.157 (-.108)					
Party size	.072 (.049)					
Length	-.216 (-.148)					
Age	-.079 (-.054)					
Residence						
Shared variance (%)	25.20	56.08	75.61	55.15	54.35	43.54
Redundancy (%)	11.86	25.66	32.73	26.87	24.95	19.53
<b>Tourists' evaluation of experiences</b>	-.906 (-.622)	-.904 (-.762)	-.940 (-.728)	-.936 (-.653)	.915 (.620)	-.870 (-.582)
	-.898 (-.616)	-.901 (-.760)	-.896 (-.694)	-.868 (-.606)	.917 (.621)	.582
Pleasure	-.758 (-.520)	-.756 (-.637)	-.766 (-.593)	-.688 (-.480)	.632 (.428)	-.721 (-.482)
Memorability	-.756 (-.519)	-.760 (-.641)	-.770 (-.596)	-.770 (-.538)	.601 (.407)	-.792 (-.530)
Perceived quality						-.804 (-.538)
Satisfaction						
Shared variance (%)	69.41	69.55	71.72	67.48	61.01	63.81
Redundancy (%)	32.66	31.82	42.99	32.88	28.01	28.62
Eigenvalue	.889	.843	1.496	.950	.849	.
% of	89.161	90.910	90.028	87.35	94.649	813
Eigenvalue	.476***	.499***	.341***	.449***	.515***	8
Wilks' lambda	.686	.843	.774	.698	.677	8.398
Canonical correlation						.497***
						.669

Our main purpose was to examine the moderating role of composite of the level of individualism and gender in the predictors-influence association. The French male group's function produced the highest canonical correlation (.774), followed by the French female group's function (canonical correlation =.698), the Taiwanese male group's function (canonical correlation =.677), and the Taiwanese group's function (canonical correlation =.669). The ranking order of canonical correlation was in accordance with our hypothesis: a composite of high individualism and male reinforces the overall contribution of the predictors to criteria. For advanced evidence, the results of Fisher's Z transformations showed statistically significant differences on the canonical correlation of part of the relationships. To sum up, we accept the following: The canonical correlation of the French male group's function was greater than that of the French female group's function ( $Z = 2.3707$ ,  $p < .01$ ), the Taiwanese male group's function ( $Z = 2.8636$ ,  $p < .01$ ), and the Taiwanese female group's function ( $Z = 3.0899$ ,  $p < .01$ ). However, there is no significant differences on the canonical correlation of relationships of M2b-M2c ( $Z =$

.5521,  $p > 0.1$ ), M2c-M2d ( $Z = .2042$ ,  $p > 0.1$ ), and M2b-M2d ( $Z = .7606$ ,  $p > 0.1$ ). This suggests that the moderating effect speculated in our hypothesis is partly supported by our findings.

## CONCLUSIONS

This study yielded insights into the role of composites of individualism and gender in moderating the overall association between nature-based tourists' experiential components and the tourists' evaluation of experiences. Based on Hofstede's framework and related research, our design, with data collected across cultures, extends the scope of the research from a model of how cultural values and gender typically articulate adolescents' experiential outcomes in terms of single dimension to a more elaborate and specific model explaining nature-based tourists' behavior, together with the moderating effects of individualism and gender which have rarely been discussed before.

Although the results of the canonical analyses on the overall sample and the subsamples consistently indicate that experiential components may be effective in creating favorable evaluation of experiences, the connecting strength of the experiences-evaluations relationship appears to differ across the cultures and gender. We combined individualism with gender to form a joint moderator that has demonstrated stronger "explaining power." This suggests that as a society becomes more individualistic with male tourists, the experiential components may contribute more to achieving their favorable evaluations. The findings pertaining to our hypothesis have provided us with insights into the relative values of various experiential components in changing tourists' evaluation of pleasure, memorability, quality and satisfaction. Our findings may serve as a basis upon which more cross-cultural studies on adolescents' influence can be developed and proposed.

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# **AN ANALYSIS OF THE DETERMINANTS OF MEDICAL TOURISM: SOUTH KOREAN PERSPECTIVE**

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## **ABSTRACT**

*The combination of medicine and tourism seems to be a promising relatively new type of niche tourism. The globalization of health care has given rise to a new form of tourism that is commonly known as health tourism. Within the health tourism arena, medical tourism is among the fastest growing sectors. It enables patients to quickly and conveniently receive medical services through travel at lower prices and at better quality than they could in their native countries. Yet analyses of medical tourism in developing, emerging markets are under developed, particularly in South Korea. As a response, this study examines the impact of customer-perceived value on medical tourism by deriving explicit factors that influence choice of medical tourism.*

**Keywords:** Medical tourism, perceived value, perceived benefits, perceived sacrifices, perceived risks, perceived proximity

## **INTRODUCTION**

One such emerging form of tourism is health tourism. Medical tourism, a type of health tourism, is a new form of tourism and a new market segment that is the result of changing times and perceptions. International trade in health services and its most high-profile component, medical tourism, have been attracting increasing attention from health analysts, the medical profession, public health policy makers, and trade and tourism promotion agencies in the recent years (OECD, 2009; 2011). However, discussions on the opportunities and threats of such trade have been conducted with relatively little data to inform them. Although the medical tourism industry is growing rapidly and has captured international attention because of its seemingly high-profit potential, little academic research has been carried out on medical tourism (Han, 2013; Heung et al., 2011; Ko, 2011; Wongkit & Mckercher, 2013; Ye, 2011; Yu & Ko, 2012). Ko (2011) particularly points out that the medical field has been more active in research in medical tourism than the tourism industry, and there is especially a lack of academic research on medical tourism in South Korea, having problems facing as it is an emerging market.

Moreover, tourism and hospitality have recently shown an interest in value, especially when investigated with quality and satisfaction (Chen & Tasi, 2006; Chen & Chen, 2010; Gallarza & Saura, 2006; Hutchinson et al., 2009; Zabka et al., 2010). However, despite the importance of the concept of customer-perceived value, few researchers have taken an interest in studying perceived value as part of a tourism experience, and a limited number of studies have focused on the concept of customer-perceived value and relationships within a tourism framework (Duman & Mattila, 2005; Lee et al., 2007; Murphy et al., 2000), and even fewer were carried out within a medical tourism framework specifically (Hallem & Barth, 2011; Wang, 2012).

As the medical tourism industry continues to grow more and more, companies, organizations, and countries begin to focus on this sector of travel. It will be critical for those involved on the supply side of the medical tourism industry to consistently deliver a higher level of service quality to differentiate them in the marketplace and to satisfy the needs and motives of the various types and growing number of medical tourist consumers (Jyptis & Janardhanan, 2009; Mueller & Kaufmann, 2001). Those medical tourism providers (companies, organizations, and countries), which do not provide high-quality service and maintain an excellent customer satisfaction rating, will find it more and more difficult to remain sustainable in the increasingly competitive market environment (Lee & Spisto, 2007).

South Korea has not had many actives in place to promote the emerging medical tourism sector. To attract more international medical tourists to South Korea, government and service providers will firstly need to understand the key drivers affecting potential customers' intention and customer satisfaction toward medical tourism. This study will be beneficial and useful to research in developing and understanding what drives the medical tourism from the customer perspective in such a new industry.

The main purpose of this paper is to analyse the determinants of medical tourism reviewing the previous studies. Therefore, it has critically been reviewed the issues based on the theory of the perceived benefits and sacrifices from customer perspective as a starting point.

## **THEORETICAL CONTEXT**

### **Medical Tourism and Perceived Benefits**

As medical tourism is a part of the service industry, perceived medical services and tourism services will be directly related to the perceived service quality received by medical tourists.

Perceived service quality is defined as the customer's assessment of the overall excellence or superiority of the service (Zeithaml, 1988), and Parasuraman et al. (1985, 1988) consider that a customer's assessment of overall service quality depends on the *gap* between expectations and perceptions of actual performance levels. They propose that overall service quality is evaluated on five underlying dimensions: tangibles, reliability, responsiveness, assurance, and empathy; and each quality dimension can be quantified by obtaining measures of expectations and perceptions of performance levels for service attributes relevant to each dimension, calculating the difference between expectations and perceptions of actual performance on these attributes and then averaging across attributes.

In marketing and tourism literatures, the service quality of the service industry has shown significant influence on customers' value perception. Reviewing the previous studies (Connel, 2006; 2013; Deloitte, 2008; Heung et al., 2011; Ye et al., 2011; Yu & Ko, 2012), they indicate that the benefits of medical tourism are as follows: cost savings, short waiting times, better quality care, and medical treatment which cannot be provided in their own native countries.

However, tourism is an intangible product. When judging medical tourism from a quality perspective, customers tend to focus on medical quality (Connell, 2006). Also, Zhang et al. (2013) indicate that with healthcare globalization, quality and cost of care should be the core reasons for international patients to seek medical facilities abroad, citing scholars such as Connell (2012), Herrick (2007), Ramirez de Arellano (2007), Smith and Forgione (2007), and Turner (2007). The paper has mainly examine the two benefits of medical tourism, which are cost savings and short waiting times.

### **Cost Savings**

According to Bookman and Bookman (2000) in their study of the flows of medical tourists from the developed to the less-developed countries, "everyone, coming from everywhere, is shopping for a doctor in the international health services market, and as a result, enjoys a cost savings over the alternative at home" (p. 2). Also, Hallem and Barth (2011) indicate that cost is a major incentive in the medical tourism industry, observing between France and Tunisia. Some figures show that operations in India cost 80 percent less than in the United States (Walker, 2006), and it says that over 47 million Americans lack health insurance (Turner, 2011). Also,

Puri et al. (2010) indicate in the *Iran Journal of Public Health* that, the reasons that encompass the need for medical tourism by many medical tourists from the United States are seeking treatment at a quarter or sometimes even a tenth of the cost in other countries as show in table 1. Medical costs in selected countries (major medical tourism destinations in Asia) adopted from OECD 2011. With several of Asia's leading medical tourism destinations (e.g., Thailand, India, Malaysia, etc.) offering world-class healthcare at state-of-the-art facilities, the costs of dental, eye, and cosmetic surgery have been substantially reduced. These costs in Asia are only a quarter of those in Western countries (OECD, 2011). According to Wang (2012), some studies have indicated that price is always a key factor for consumers when purchasing hotel accommodations (Law & Chung, 2003; Liang & Law, 2003) and tourism products (Law, 2003). Also, it has been contended that perceived fee directly influences perceived value (Dodds et al., 1991; Zeithaml, 1988).

Therefore, cost savings in medical tourism is one of the most important factors and main benefits among others (long waiting times, better quality of care, unique medical treatments), while patients travel for medical care outside of their home countries (Sarwar et al., 2012).

**Table 1: Medical costs in selected countries (major medical tourism destinations in Asia)**

Surgery	USA	UK	India	Thailand	Singapore	Malaysia
Heart Bypass	\$113,000	\$13,921	\$10,000	\$13,000	\$20,000	\$9,000
Heart Valve Replacement	\$150,000		\$9,500	\$11,000	\$13,000	\$9,000
Angioplasty	\$47,000	\$8,000	\$11,000	\$10,000	\$13,000	\$11,000
Hip Replacement	\$47,000	\$12,000	\$9,000	\$12,000	\$11,000	\$10,000
Knee Replacement	\$48,000	\$10,162	\$8,500	\$10,000	\$13,000	\$8,000
Gastric Bypass	\$35,000		\$11,000	\$15,000	\$20,000	\$13,000
Hip Resurfacing	\$47,000		\$8,250	\$10,000	\$12,000	\$12,500
Spinal Fusion	\$43,000		\$5,500	\$7,000	\$9,000	
Mastectomy	\$17,000		\$7,500	\$9,000	\$12,400	
Rhinoplasty	\$4,500	\$3,500	\$2,000	\$2,500	\$4,375	\$2,083
Tummy Tuck	\$6,400	\$4,810	\$2,900	\$3,500	\$6,250	\$3,903
Breast Reduction	\$5,200	\$5,075	\$2,500	\$3,750	\$8,000	\$3,343
Breast Implants	\$6,000	\$4,350	\$2,200	\$2,600	\$8,000	\$3,308
Crown	\$385	\$330	\$180	\$243	\$400	\$250
Tooth Whitening	\$289	\$500	\$100	\$100		\$400
Dental Implants	\$1,188	\$1,600	\$1,100	\$1,429	\$1,500	\$2,636

Source: <http://www.oecd.org/els/health-systems/48723982.pdf> (OECD, 2011).

## Short Waiting Times

Most patients in the United Kingdom and Canada lack timely access to elective procedures and hence have a strong willingness to travel to other countries for the purpose of medical treatment (Grail Research, 2009).

From Canada, it is often people who are frustrated by long waiting times; and from the UK, they are the patients who cannot wait for treatment by the National Health Service, so they decide to go abroad to have quicker accesses. According to *A Report Card on Wait Times in Canada 2013*, Canadians still wait too long to access many healthcare services, waiting longer for care than citizens of most other industrialized countries with

publicly financed systems. For example, the average wait time for hip and knee replacements in the Netherlands is eight weeks, and the average wait time for cataract surgery is five weeks, yet many Canadians wait longer than 26 weeks for a hip or knee replacement and more than 16 weeks for cataract surgery (Canadian Medical Association, 2013). Also, both Scotland and England have set and met the target of having 90 percent of elective care patients wait no longer than 18 weeks from general practitioner referral to start of treatment for a wide range of medical care (NHS, 2014). However, NHS data shows that 2.88 million people in England were waiting for consultant-led treatment in December 2013, up by 310,000 or 12 percent on May 2010 (Guardian, 2014). Slashing the waiting time can attract patients from Canada and Britain where patients are fed up with long queues for elective surgery under overstretched government health plans, though their treatment is free under such plans (Upadhyaya & Hakeem, 2013).

## **Medical Tourism and Perceived Sacrifices**

As with any emerging sector, medical tourism has a number of negative aspects (Hall & James, 2011; Heung et al., 2010; Snyder, 2013). An overarching concern is that medical tourism may negatively impact access to health care and health equity both in the patient's home and destination countries. Medical tourism raises concerns about health equity considering the fact that wealthy citizens can afford to buy immediate access to care, while poorer citizens wait in queues. Also, there is a growing academic literature on medical tourism, including essays surveying ethical concerns related to the impact of this practice on global public health (Turner, 2011; Snyder et al., 2012; 2013).

Perceived sacrifice consists not only of actual monetary costs but also of non-monetary costs (Cronin, 1997; Lovelock & Wirtz, 2011). One important point made with respect to this conceptualization of value is that direct monetary cost (price) is only one component of what consumers give up or "sacrifice" to obtain a service (Zeithaml, 1988). Also, sacrifice is a broader, richer construct which includes such non pecuniary costs as the time, effort, and risk assumption associated with a particular purchase (Cronin, 1997). While there are always risks associated with travel, three perceived travel-related sacrifices that are particularly relevant to medical tourists were highlighted in the literature. Therefore, based on the current issues, the paper has proposed that the total perceived sacrifice of participating in medical tourism includes components such as perceived risk, perceived fee, and perceived proximity among potential customers.

## **Perceived Risk**

As healthcare practices differ among countries, patients seeking offshore treatment are exposed to several risks (Crooks, 2010; Turner, 2011). Samir and Karim (2011) indicate that it is necessary to understand that medical tourism is not completely a regulated industry and may lead to risks of varying degree depending on several factors. Also, Bies, and Zacharia (2007), Crooks et al. (2010), and Leahy (2008) point out that there are unique risks associated with seeking medical care overseas and consider that the main risks include exposure to medical malpractice abroad, difficulties obtaining follow-up care, and the danger of infectious disease transmission. Therefore, the paper concerns most significant issues such as patient safety, bio security risk, ethical and legal issues, and language and culture differences, which should be considered when potential customers decide to participate in medical tourism.

## **Patient Safety: Follow-up Care from Medical Malpractice**

Patient safety with follow-ups and continuity of care is the most serious issue in medical tourism (Samir & Karim, 2011). Travelling abroad for treatment is possible, but frequent visits for follow-ups may not always be possible, and thus, patients resort to their primary physicians for follow-ups and continuity of care. American and Canadian patients receiving bariatric surgery abroad have returned home needing extensive and expensive follow-up treatments (Birch et al. 2010). These treatments can make complications more likely if the treatment undermines continuity of care, and if there are any complications or side effects, then they become the responsibility of the medical system in the patient's home country. Continuity of care is likely to be disrupted as there are currently no adequate systems in place to enable the transfer of health records between medical tourists and their physicians at home and destination countries (Crooks et al., 2010; Samir & Karim, 2011). Also, patient

follow-up by providers is rare. A study of 20 patients at a German university hospital after overseas refractive surgery concluded that there was insufficient management of complications and a lack of post-operative care (Lunt et al, 2011). Additionally, patients may have little resources if complications and side effects occur as most of the countries that currently offer medical tourism programs have poor malpractice law.

## **Bio Security Risk**

Bio security risk can be involved during the medical treatment. According to Hall (2013), an important issue with respect to medical and health tourism that is gaining growing recognition is its potential bio -security risks with respect to humans acting as vectors for disease and drug-resistant bacteria. Also, Hall (2011) notes that “medical tourism is intrinsically different from general tourism activities with respect to increasing bio security risks because individuals who engage in medical tourism are deliberately travelling to a medical environment and engaging in medical practices that potentially exposed them to new pathogens and microbiologic fauna and flora”(p. 120).

While not directly related to worries about inequities in access to health care, international travel for care can expose patients to infectious disease, and it is brought back home and infects others. Some destinations may become hazardous or even dangerous for medical tourists to contemplate. Some countries such as India, Malaysia, Costa Rica, or Thailand have very different infectious disease-related epidemiology in contrast to Europe and North America. Exposure to diseases without having built up natural immunity can be a hazard for weakened individuals, specifically with respect to gastrointestinal diseases (e.g. hepatitis A, amoebic dysentery, paratyphoid) which could weaken progress, mosquito-transmitted diseases, influenza, and tuberculosis. However, because in poor tropical nations diseases run the gamut, doctors seem to be more open to the possibility of considering any infectious disease including HIV, TB, and typhoid, while there are cases in the West where patients were consistently misdiagnosed for years because such diseases are perceived to be “rare” in the West (Puri et. al., 2010).

## **Ethical and Legal Issues**

Medical tourism has been associated with numerous ethical concerns (Sydner et al., 2011; 2013; Turner, 2007). The consumers have to abide by the medical tourism destination’s laws and regulations in the event of negative outcomes or complications after treatment, but it is not known whether the ethical concerns discussed are shared by patients participating in medical tourism (Snyder et al., 2012). Moreover, it is not well understood what steps, including domestic regulatory reforms, actions by nongovernmental organizations and other international groups, and international legal frameworks, might eliminate or mitigate the potential negative impacts of medical tourism. Most tellingly, while the ethical concerns typically raised against medical tourism are highly general in form and meant to apply to the practice globally, medical tourism is a highly diverse practice, taking many different forms in many different countries (Snyder et al., 2012). It is also thought that undertaking procedures that are illegal in the patient’s home countries or experimental may expose medical tourists to unknown health risks, which may be the very reason that these same surgical procedures are not being performed in their home countries (Crooks et al., 2010).

## **Language and Culture Differences**

Accessing medical care abroad can also create an undue burden for those who find travelling difficult. For example, persons with physical impairments and those who have limited experience with foreign cultures and languages may find travelling abroad for medical care particularly onerous (Hall & James, 2011).

## **Perceived Fee**

Value studies in tourism suggest that perceived service quality and monetary price are two main antecedents of perceived value of tourism services. In general, it is widely accepted in tourism marketing literature that perceived service quality is positively related to perceived value, while perceived monetary price is negatively



related to perceived value. Perceived fee in this paper refers to the monetary transaction costs of purchasing a medical tourism product. However, the paper indicates earlier that cost savings is the main benefit to choose medical tourism. Therefore, the perceived fee of perceived sacrifices in this paper will consider the extra cost of flights, accommodation, and tour packages, which people would not need in their home countries.

## **Perceived Proximity**

Medical tourism adds a new dynamic to this element of risk due to the overseas travel involved. The journey home can be difficult and painful, especially the first pertains to airline travel. According to Lunt et al. (2011) in the OECD report “Medical Tourism: Treatments, Markets and Health System Implications: A Scoping Review,” a study of Norwegian patients found that this was perceived as the most negative aspect of visiting overseas providers (HELTEF, 2003).

Travelling when unwell can lead to further health complications, including the possibility of deep vein thrombosis (Crooks et al., 2010). More specifically, flying with a serious health condition in advance of the surgery while getting to the hospital, patients not well enough to move around during the flight may have restricted blood flow to areas of the body, thus resulting in deep vein thrombosis. Despite medical tourism involving air travel, there is no published evidence on travel risk resulting from medical tourism.

It was also noted that being away from family, particularly during the recuperative period abroad, and the mental strain of travel may lead to the onset of psychological or emotional stress for medical tourists, thus posing as another type of travel-related health risk (Crooks et al., 2010).

## **Managerial Implications and Further Research**

In this rapidly growing consumer-oriented health industry, quality has become the integral part. Without providing quality services, no business can survive. People from rich countries are travelling to less developed countries because of less expensive but high-quality medical care. Sarwar et al. (2012) specially caution that in the health-care industry, technical equipments and other related medical diagnoses systems are core for patients’ check up for their treatment and functional quality measured by the service offered by the health-care centres such as the services of the staffs, nurses, administrations, and most importantly the doctors toward the patient and their assistants. Medical care for foreigners requires a high degree of trust in medical services based on high-quality medical staff, top-tier technology, or advanced medical systems. When the quality of medical services is established, this quality must be recognized by foreign medical customers. Evidence of high-quality medical services can be found in the international certification system, in which Joint Commission International (JCI) certifies medical service institutions that meet international standards. Potential medical tourists will believe that certified institutions provide safer, higher-quality medical services.

The paper has only analysed the perceived benefits and sacrifices on medical tourists based on the basic principle of Zeithaml (1988) and Lovelock and Wirts (2011) and mainly viewed the importance of medical service perspective. It is understandable that one of the main reasons people travel abroad for medical purpose is to save on the high medical treatment costs in their home country (Connell, 2006). However, Eman (2011) suggests that all destinations have to consider the development of the other two main elements to be able to compete in the international market of medical tourism: the support services as well as the complimentary travel and tourism services. From a customer’s perspective, those two aspects are fundamental to be supported in the medical tourism industry.

This aspect is also supported by Cormany (2008), who identifies four factors (medical facilities and related services, accommodations and food and beverage services, tourists facilities and services, and government policies and socio-cultural elements) that the consumers of medical tourism take into account when selecting medical tourist destinations regions.

Therefore, further research will be developed on as follows:

- Developing the perceived benefits and perceived sacrifices by perspectives from tourism services, medical services, and supportive services
- Examining the theoretical relationships between the constructs such as perceived value, customer

- intention toward to medical tourism, received value, and customer satisfaction in a medical tourism
- Investigating and analysing the factors (perceived benefits and sacrifices) influencing the perceived value entering medical tourism destination to South Korea based on data gathered from medical experts or professionals, private or public hospitals, government bodies, institutions, and medical tourists in South Korea

Its findings will contribute to the literature by revealing the key factors to the development of the medical tourism industry in South Korea, and help to flesh out the important issues that hinder development of medical tourism in South Korea.

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# **IMPLEMENTING OF CORPORATE SOCIAL RESPONSIBILITY ON THE EXAMPLE OF REPUBLIC OF KAZAKHSTAN AND REPUBLIC OF POLAND**

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## **ABSTRACT**

*The main objective of this study is to show, that despite the fact each country and region has its own concept of distinctive features of understanding of the approaches and principles of CSR, the combined efforts of the government, business and non-governmental organizations can create conditions for the development of the ideas and principles of CSR in Republic of Kazakhstan and Republic of Poland. According the results of the completed research, we can conclude that corporate social responsibility has great development potential both in Kazakhstan and in Poland.*

**Keywords:** Corporate Social Responsibility, Corporate Management, Good business practices, Economic and social development

## **INTRODUCTION**

Etymological dimension of the corporate social responsibility refers to the idea of responsibility based on the basic, classical philosophical concepts. Difficulties appear when an attempt is made to define the subject of such responsibility. When talking about legal responsibility, the subject of it are enterprises that have legal personality, which is in turn transformed into legal capacity. In case of the responsibility that exceeds the boundaries of legal provisions, the situation becomes more complicated. This is why corporate responsibility comprises the following levels: units, enterprises and business as a whole. The notion of responsibility includes a reference to the idea of freedom, whose development showed two principal trends. First one was the attempt to expand freedom, which can be seen in modern liberalism. The other one defines the limits of freedom by showing negative effects of its excess.

CSR originated in the United States at the end of the 18th century. At that time, social responsibility was perceived mainly as charity. In the next decades, this concept was elaborated by many authors. In 1932 Marrick Dodd expressed an idea that corporations – due to the fact that they are part of the society – should act in the best interest of the society and affect public wellbeing. Adolf Berle, in turn, strived to determine particular limits of such responsibility. As time passed, the views of Adolf Berle, and later on also of M. Friedman (liberally-oriented), who narrowed down the impact of enterprise only to relationships with shareholders, became less and less popular – it was observed that each action of the entrepreneurs has much broader impact and that it affects not only the society, but also environment. It is the society that allowed these bodies to function in the market, so now companies must take care of the values significant for this population (Bernatt, 2009, pp. 23 et seq.). A person important from the point of view of CSR development was Howard Bowen, who published „*Social Responsibilities of the Businessman*” in the 1950s. In this publication, the author tried to prove that corporations should aim to conduct their business in line with the interest of the society.

The concept of social responsibility was diffused only at the beginning of the 1970s, mainly in the USA, Japan and Western Europe. Its development was facilitated by the development of interest in the subject of business ethics, which was in turn translated into a change of the way in which the entrepreneurs' objectives were perceived in that they were no longer associated only with the profits they generated, but they were also analysed in the context of following ethical principles.

Nowadays, CSR is manifested in voluntary consideration of social interest by corporations and taking care of the environment as well as shaping the relationships with various groups of stakeholders already in the phase of creating the corporate strategy. In the strategy of the European Committee 2011–2014, the notion of CSR is understood as *the responsibility of the organisation for the impact of its decisions and actions (...) on the society and environment through transparent and ethical conduct, which contributes to balanced development, sustainability, health and wellbeing, takes into consideration stakeholders' expectations, is consistent with mandatory law and with international norms of behaviour, and practised in its relationships* (ISO 26000 Norm). According to the international standard for social responsibility, ISO 26000, a company is responsible for its impact on the society in 7 key areas, namely: corporate governance, human rights, labour relations, relationships with consumers, natural environment protection, social involvement. It is worth noting that this standard is not a certified standard, which emphasises the aforementioned significant rule of CSR – voluntariness. The biggest companies in the world are becoming more and more aware of the need to implement CSR policy. During the 43<sup>rd</sup> World Economic Forum in Davos (2013), William George from Harvard Business School (USA) observed that the companies that focus only on corporate property and wealth are in the end subject to self-destruction.

## **ETHICS AS THE FOUNDATION OF CORPORATE DEVELOPMENT**

The scale, intensity, complexity and dynamics of transformations observable in national economies as well as in global economy prove that a new phase has begun in the socioeconomic development – one that Alvin Toffler referred to as the post-industrial phase (see also Toffler<sup>1986</sup>). The transformations of the 20<sup>th</sup> and 21<sup>st</sup> century have a global dimension and the main driver of such changes are i.a. competition-related processes, financial systems (including present phenomena of crisis) and global markets and outlets.

Corporate development forces – through a change of internal conditions and pressure of the surrounding environment – a change in behaviour in the sphere of organising and managing available resources (Wawrzyniak, 1986).

Changes in the systems of values and social norms are always closely related to the technical and technological development in particular moment. They force the involvement of people refocused in their predispositions and qualifications and they determine the behaviour of those people in the organisations created by and for themselves. The main symptom of the new outlook on “economic reality” is the need to treat a corporation as the basic subject of interest. The challenges of the modern world and globalisation processes related to it, faced with the constantly revealed new symptoms of crisis, show considerable dysfunctions as far as including the ethical dimension of business in the vision of organisational system development is concerned. This is observed not only at the level of organisation, but also at the level of public systems (for example in Greece). This is why changes are postulated and even necessary – there is a lot to indicate that the so-far model of development is now regarded as lacking the elementary formulas founded on the set of honest, moral types of behaviour, which is referred to as business ethics when transposed into the organisational formula.

Development is a challenge. It seems natural, therefore, to live up to contemporary expectations and requirements, but when this process is based only on business formula, without considering the ethical dimension, it may mean that after some time, development understood in this way may become a significant limitation or even a threat.

The time factor and way of thinking and acting related to it is an inherent component of contemporary visions of corporate development. Economic activity should therefore mean the ability to shape the directions of organisational development by identifying observed processes or predicting events that may take place along with their proper diagnostic assessment correlated with the competitive potential of the corporation. This

paradigm should, however, be expanded with an element that is fundamental in character and related to the ethical conduct of corporations (Bounds et al., 2012a, p. 147).

The dynamics of external environment conditions the way the corporation is managed. Integrated management, aimed at harmonious and lasting development of the company, may guarantee that such development will be balanced only if it is combined with particular ethical attitudes (Buła et al., 2013, pp. 313-340).

Generally observable market trends – characteristic due to the increasing dynamics of competition processes and shorter life-cycles of products and whole branches – encourage the search for management methods that would eliminate the ever-increasing business risk. The notion of strategic corporate management (see Sojkin-Urbanowska et al., 2004), although constantly growing and not yet abundant with the experience of practical application, seems to be fully consistent with the existing demand in this area. However, it should also be expanded with ethical aspects of corporate activity. If transferred to the level of competition analysis, it constituted the basis for developing long-term corporate development concepts based on relationships observable in the sectors of the organisational business. The impact of the situation within the branch on the options of strategic choices made by the managers seems indisputable. What is therefore disputable is the type of response to market challenges as well as the way of diagnosing them and the effectiveness of such diagnosis, considering the total architecture related to the ethical dimension of business.

Corporate social responsibility combines many tasks related i.a. to the care of natural environment, affluence of the regions, openness of business activity. A unit must consider both the needs and expectations of the shareholders and those of the local environment. Society expects natural resources to be processed reasonably and human resources to be managed properly. All of this entails the application of the democratic principle, most of all in the relationships between the employer and employee (Bernatt, 2009, pp. 25 et seq.). The key to the CSR application is observing basic rules, such as: honesty, sensitivity, reliability, righteousness and loyalty. A specific exemplification of the CSR idea in the area of management seems to be the proposed concept of social management (see also Fudaliński, 2013).

In the times of constant and dynamic changes of the surroundings, progressing globalisation processes in the area of corporate and market activity as well as turbulent changes in the economic situation, it is worth analysing various aspects of organisational functioning on the basis of comparative research (Bounds et al., 2012b, pp. 75-87) with reference to various countries, which may often be similar in many areas and issues, but it does not mean there are no significant differences.

## **CSR IN KAZAKHSTAN: SITUATION, PROBLEMS AND PERSPECTIVES**

Within the project titled *Creating an integrated approach to promoting Corporate Social Responsibility in Kazakhstan*, implemented with the financial support from the Dutch Embassy in Kazakhstan, the Eurasia Foundation of Central Asia (EFCA) commenced a research project *The development of corporate social responsibility in Kazakhstan: the situation, problems and perspectives for development*. The project was realised in April and May 2013. The objective was to determine the current understanding, expectations and motivation of key stakeholders, as well as the perspectives for CSR development in Kazakhstan.

In various parts of the world the CSR concept is manifested in a set of certain characteristic features. It is related to the history, national and cultural features, as well as to the political, economic and social level of development of the particular country or region. The countries belonging to the Commonwealth of Independent States (CIS) also have their own specific nature, which is defined i.a. by the negligible participation of government institutions in shaping CSR and at the same time, strong role of international institutions (UN, EU, embassies of European countries), small role of public and expert organisations and the media. It is worth mentioning that the companies are encouraged to implement CSR in the countries belonging to the CIS by the regulatory instruments (law, government regulations and programmes). It is estimated that in the long run, the CIS countries may gradually approach the European model, which results mainly from the processes of political and economic integration. However, this process is going to take time. Nevertheless, right now 13 large



corporations and 11 non-government organizations in Kazakhstan became parties to the UN Global Agreement on corporate social responsibility (the agreement was adopted during the World Economic Forum in Davos in 1999 and it assumes that the companies that accede to it agree to adopt and voluntarily observe ten generally adopted rules for observing human rights, labour relations, natural environment protection and counteracting bribery and corruption, [www.polish.ruvr.ru](http://www.polish.ruvr.ru)).

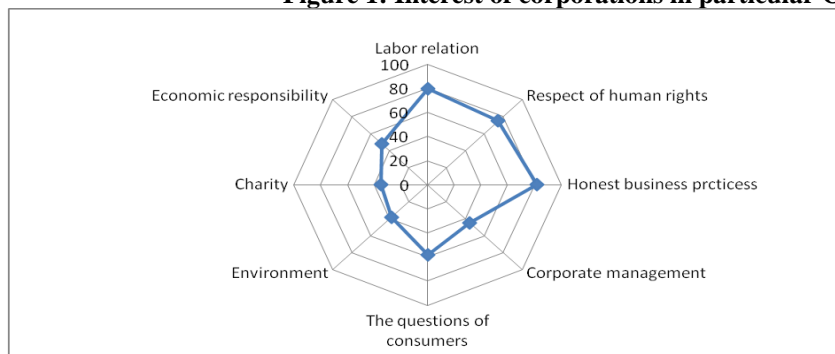
The promulgation of the CSR in Kazakhstan is definitely facilitated by the political situation, which has been favourable recently – in order to promote it among corporations, first national standards and government programmes have been developed. One of the key requirements for the promulgation activities to be effective is the very awareness of this concept, shown among the entrepreneurs. A survey conducted as part of the study showed that 63% of the respondents are familiar with the CSR concept. This data is similar to the results of the research completed as part of the UN Development Programme (UNDP), conducted in 2008. The studies do not show significant changes in the recent period of time, though (i.e. in 2008–2013). It should be observed that such awareness is lower among Kazakh corporations (61%) as compared with foreign companies (80%) and entities with mixed ownership (74%).

Quantitative and qualitative research shows that the representatives of small business are the least aware of the need to implement the notion of CSR. Some of the reasons are deemed to be: lack of interest in CSR among the managerial staff and limited opportunities of small companies (low revenues, no experience, poor legal competences). *Small companies are far from CSR. Basically, they usually completely lack information. In the morning they go to work, in the evening they come back, they do not read the papers, they do not watch TV and they are wary about everything. Large companies are highly aware and willing, because they have definite standards. It is a general corporate philosophy* – from the interview with the Economic Association.

The companies which realise the CSR concept usually have dedicated budget, appropriate management structure and they can monitor and assess its effects. The most popular organisational solution applied by the companies that implement CSR ideas is a special budget to finance social activity (36%). It is worth noting that among the corporations operating in the Kazakh market, the participation of those with dedicated CSR budget has gradually increased (from 19% in 2006 to 35% in 2013), although in the period 2008–2013 only by 5 percentage points.

According to the results of the conducted research, there is no full understanding of the CSR concept among the corporations, but it is possible to indicate more popular and often used trends. In Kazakhstan, the CSR areas considered most popular among the corporations are: honest and fair business practice (82%), employment and hiring policy (80%) and human rights (75%). Only 58% of the corporations implement the policy addressed to the consumers, while the actions aimed at natural environment protection are implemented only by 38%.

**Figure 1: Interest of corporations in particular CSR areas**



Source: own study

It should be underlined that the practices included in particular CSR areas, but regulated by a relevant scope of legislation – although it opposes the adopted rule of voluntariness – are also aimed at realising the social responsibility policy as far as their effect is concerned.

During the research, the respondents were therefore asked to indicate all CSR practices applied in the companies. The list included the legally regulated practices contained in various CSR areas, but the respondents were also asked to indicate all the actions that are performed in their companies, but not defined by legal provisions. The analysis of obtained results showed that the most popular actions within the CSR scope are the practices that are either legally imposed or regulated by mandatory legal provisions.

According to the majority of the respondents (67%), in order to stimulate and promulgate the idea of corporate social responsibility, it is necessary to introduce the incentive system for the companies that actually implement the concept (e.g. preferential taxes). Another essential step on the way to promulgating social responsibility, as indicated by the studied group of entrepreneurs (32,3%) is the realisation of the promotional campaign in order to raise the awareness of the purpose of actions included in the scope of CSR. The third element indicated by the researched group (31,7%) was the development and adoption of the national strategy for CSR development in business. Along with the above conclusions, the respondents (24,9%) indicated that it is necessary to eliminate administrative barriers at the same time, as they impede business development (unreasonable, frequent inspections performed by fire-protecting services, sanitary and epidemiological service or fiscal service etc.).

The main initiators of CSR promotion in Kazakhstan – according to the majority of the respondents (72%) – should be the government along with the corporation owners (52%) and local authorities (46%). It should be noted that most of the respondents did not notice the positive role of the “civic sector” in this scope.

In the research completed in 2008, most of the surveyed group of entrepreneurs (75,6%) claimed that CSR development in Kazakhstan may support public institutions in solving social problems. Business was ready to take part in social projects, provided, however, that the government would create an adequate incentive system. In the study completed in 2013, the opinion of the entrepreneurs concerning the role of the state in CSR development did not experience any significant change. Most of the respondents (71%) perceive the state as the main initiator of socially responsible actions, which activates business and encourages it to become involved in solving social problems.

In the opinion of most respondents (61%), the corporations should be actively involved in solving social problem in the region. One fifth of the respondents claimed, though, that business should only feed the budget in the form of remitted taxes. What is important, the percentage of respondents who believe that business should only be limited to the role of taxpayer in 2008 was 52,8%, while in 2013 it was considerably reduced – by ca. 34%. It proves that over 5 years there has been a change in the perception of CSR. The comparison of these results shows that in the corporate sector there is a growing awareness of the social role of this sector, especially among the local community in which this sector conducts its direct business activity.

Generally, it should be concluded, however, that the studies have shown a relatively low level of CSR awareness in the corporate sector, which has not changed considerably in the period 2008–2013. This is why it is necessary and urgent to take up intensified actions in order to promote socially responsible business. Such actions should be addressed at the whole population, in particular to the corporate sector, public sector, consumers, non-government organisations, etc., by well-prepared information campaigns and educational programmes indicating the best international practices and using the existing national experience in this scope.

## **RESPONSIBLE BUSINESS – POLISH EXPERIENCE**

In Poland, research on CSR is conducted i.a. by the Forum of Responsible Business in cooperation with PwC, by publishing *Ranking Odpowiedzialnych Firm* (the Ranking of Responsible Companies). The studies – performed each year since 2007 – are conducted through surveys. A survey – depending on the release – was made up of a few dozen questions related to particular areas of CSR. Weight and maximum number of points are assigned to each question. Unfortunately, comparing the results from particular releases is difficult, because in each release the survey is subject to changes; still, the comparison of tendencies and trends is possible and has considerable cognitive value.

The analysis of the outcome of such ranking since 2007 allows for the formulation of a thesis that corporations are more and more actively involved in social issues. One of the authors of the ranking emphasises that *“when browsing through the results of the Ranking of Responsible Companies since 2007, we can see that more and more corporations treat their role in the society more and more seriously. It is manifested for example in the fact that vast majority of the companies that join our ranking obtain more than half of available points”* (Horodecki, 2014).

A positive phenomenon observed by PwC experts is the significant growth of the proportion of companies that actively manage the areas important for sustainable development. In the 2014 release as many as 76% of companies claim they are actively involved in this scope (in comparison to the 2013 release, there has been an increase by 19%). It is also worth emphasising that *“there has been a considerable progress as regards the management, monitoring and internal verification of CSR-related actions. What is important, we can see that the approach to CSR is not related to the source of capital. Domestic companies are in this scope no worse than companies belonging to international holdings”* (Szlachta & Badora, 2014). On the basis of the ranking, certain conclusions can be drawn as regards particular branches of economy.

**Table 1: 8<sup>th</sup> ranking of responsible companies 2014**  
**The most socially responsible companies divided by branch**

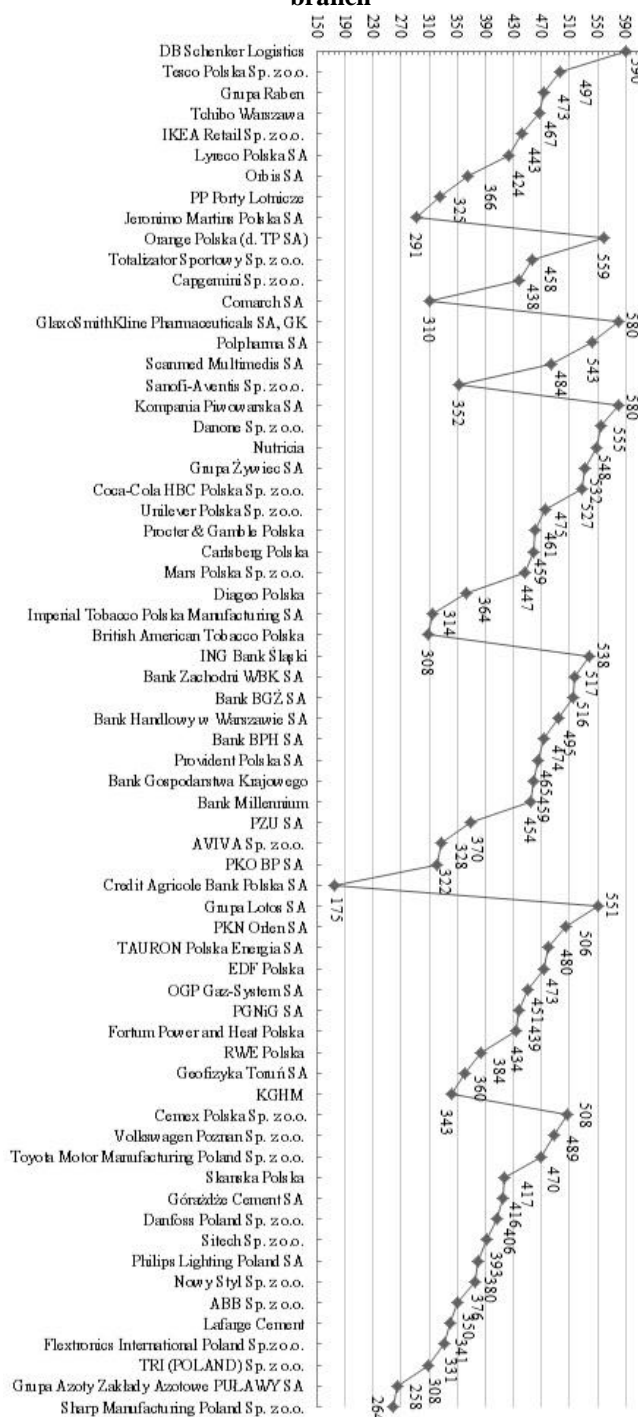
Position in the branch in the 2014 ranking	Position in the 2014 ranking	Company	Responsible leadership	Social involvement	Communication with stakeholders	Social innovation	Responsible management	Total
<b>Banking, finance and insurance sector</b>								
1	8	ING Bank Śląski	84	80	92	90	192	538
2	11	Bank Zachodni WBK SA	100	98	70	72	177	517
3	12	Bank BGŻ SA	84	90	92	100	150	516
4	16	Bank Handlowy w Warszawie SA	90	90	88	92	135	495
5	21	Bank BPH SA	92	70	84	76	152	474
6	25	Provident Polska SA	100	88	70	70	137	465
7	27	Bank Gospodarstwa Krajowego	88	66	70	76	159	459
8	29	Bank Millennium	72	70	62	100	150	454
9	44	PZU SA	48	50	92	40	140	370
10	53	AVIVA Sp. z o.o.	54	78	46	35	115	328
11	55	PKO BP SA	30	66	50	78	98	322
12	62	Credit Agricole Bank Polska SA	22	22	28	20	83	175
<b>Consumer goods</b>								
1	2	Kompania Piwowarska SA	100	88	100	100	192	580
2	4	Danone Sp. z o.o.	100	78	100	100	177	555
3	6	Nutricia	100	88	70	90	200	548
4	9	Grupa Żywiec SA	92	80	90	100	170	532
5	10	Coca-Cola HBC Polska Sp. z o.o.	100	70	84	94	179	527
6	20	Unilever Polska Sp. z o.o.	76	60	92	90	157	475
7	26	Procter & Gamble Polska	100	72	58	68	163	461
8	27	Carlsberg Polska	92	50	70	84	163	459
9	31	Mars Polska Sp. z o.o.	74	58	68	88	159	447

10	46	Diageo Polska	82	52	32	51	147	364
11	56	Imperial Tobacco Polska Manufacturing SA	52	62	48	40	112	314
12	58	British American Tobacco Polska	56	30	40	64	118	308
<b>Pharmacy and medicine</b>								
1	2	GlaxoSmithKline Pharmaceuticals SA, GK	100	80	100	100	200	580
2	7	Polpharma SA	100	88	90	100	165	543
3	18	Scanmed Multimedix SA	82	62	82	90	168	484
4	48	Sanofi-Aventis Sp. z o.o.	52	66	32	66	136	352
<b>Fuels, energy, mining</b>								
1	5	Grupa Lotos SA	100	76	100	100	175	551
2	14	PKN Orlen SA	92	88	92	90	144	506
3	19	TAURON Polska Energia SA	92	78	100	90	120	480
4	22	EDF Polska	82	64	58	92	177	473
5	30	OGP Gaz-System SA	82	72	100	75	122	451
6	33	PGNiG SA	100	48	92	90	109	439
7	35	Fortum Power and Heat Polska	92	48	42	100	152	434
8	41	RWE Polska	44	58	82	46	154	384
9	47	Geofizyka Toruń SA	62	58	60	58	122	360
10	50	KGHM	42	28	82	86	105	343
<b>Industrial and chemical production</b>								
1	13	Cemex Polska Sp. z o.o.	100	80	92	88	148	508
2	17	Volkswagen Poznan Sp. z o.o.	90	60	62	90	187	489
3	23	Toyota Motor Manufacturing Poland Sp. z o.o.	74	78	70	88	160	470
4	37	Skanska Polska	82	72	40	68	155	417
5	38	Góraźdże Cement SA	64	70	62	68	152	416
6	39	Danfoss Poland Sp. z o.o.	84	38	50	84	150	406
7	40	Sitech Sp. z o.o.	100	32	44	69	148	393
8	42	Philips Lighting Poland SA	72	40	40	78	150	380
9	43	Nowy Styl Sp. z o.o.	68	68	60	76	104	376
10	49	ABB Sp. z o.o.	68	40	42	58	142	350
11	51	Lafarge Cement	20	40	60	86	135	341
12	52	Flextronics International Poland Sp. z o.o.	64	44	30	62	131	331
13	58	TRI (POLAND) Sp. z o.o.	72	32	40	36	128	308
14	60	Grupa Azoty Zakłady Azotowe Puławy SA	18	36	82	68	60	264
15	61	Sharp Manufacturing Poland Sp. z o.o.	40	0	28	46	144	258
<b>Telecommunications, technology, media and entertainment</b>								
1	3	Orange Polska (d. TP SA)	100	88	92	100	179	559
2	28	Totalizator Sportowy Sp. z o.o.	88	88	88	69	125	458
3	34	Capgemini Sp. z o.o.	76	80	70	67	145	438
4	57	Comarch SA	28	30	68	69	115	310
<b>Transport, services, trade</b>								
1	1	DB Schenker Logistics	100	98	100	100	192	590
2	15	Tesco Polska Sp. z o.o.	92	70	84	68	183	497
3	22	Grupa Raben	92	60	62	100	159	473
4	24	Tchibo Warszawa	92	88	62	70	155	467
5	32	IKEA Retail Sp. z o.o.	84	66	60	70	163	443
6	36	Lyreco Polska SA	92	28	68	74	162	424
7	45	Orbis SA	82	32	70	82	100	366

8	54	PP Porty Lotnicze	70	22	72	71	90	325
9	59	Jeronimo Martins Polska SA	38	36	32	92	93	291

Source: VIII Ranking Odpowiedzialnych Firm 2014 (8<sup>th</sup> Ranking of Responsible Companies), *Dziennik Gazeta Prawna*, 28.04.2014.

**Graph 1: A comparison of maximum and minimum number of points obtained in the ranking in 2014 by branch**



Source: Developed on the basis of the report: VIII Ranking Odpowiedzialnych Firm 2014 (8<sup>th</sup> Ranking of Responsible Companies), *Dziennik Gazeta Prawna*, 28.04.2014.

Some of the branches (as e.g. banking, financial and insurance sector) are characterised by high disproportion between the minimum and maximum score obtained by particular companies. It may mean that there are significant differences in the practical implementation of the CSR concept in this sector and that there is no consolidation of the actions performed in the areas of sustainable development. As the most socially involved sectors of economy we could indicate the pharmaceutical and medical branch as well as fuel and energy branch. It may follow both from the need to observe high technological and environmental norms related to the production process itself, which is in turn reflected in the pro-social attitude of these corporations as regards the shaping of relationships with the external environment (see also graph 1).

What may arouse concern is the weight assigned to particular areas of assessment adopted in the studies. Particular weight has been assigned to one of the less objective areas among those subject to assessment, and one that is the most difficult to verify, namely the area titled “responsible management”. The survey is completed by company representatives, often managerial staff, that is why one may reasonably suspect that there may have been a lack of objective attitude in this respect. The other four areas of the assessment, i.e. “responsible leadership”, “social involvement”, “communication with stakeholders” and “social innovation”, all have the same weight in the process of assessment.

## CONCLUSION

In Kazakhstan, the concept of corporate social responsibility is now at a different stage of development than in Poland. As regards the theoretical part, this is now only a definition approach, while the implementation among the entrepreneurs is still relatively uncommon. Available studies are not comprehensive and not generally accessible. They also refer to a relatively small group of corporations, that is why the analyses that can be performed on this basis are necessarily rather general. It should be emphasised, though, that both the efforts of the scientific circles which readily take up this subject of study and favourable social and political situation, good for initiating changes in this scope, allow us to suspect that in the years to come the idea of sustainable development will find a broader practical application.

In the case of Poland, the studies of corporate social responsibility have been performed cyclically since 2007 and are generally accessible to broad public. The data on the basis of which further analyses are conducted is verified by independent experts. The reports are prepared on the basis of defined assessment criteria as regards particular areas that are subject to the analysis. Such an approach allows to draw conclusions regarding particular sectors or branches of economy both by the observers of social and economic life and by the entrepreneurs themselves, thus enabling them to measure the impact of business on its external environment, to calculate external costs and benefits related to the functioning of such business.

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# THE CHI-SQUARE ( $\chi^2$ ) DISTRIBUTION AS A RESEARCH TOOL, AND SOME OF ITS MOST IMPORTANT PARAMETRIC AND NON-PARAMETRIC APPLICATIONS

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## ABSTRACT

*When researchers are testing the validity of claims during their research, they may use either parametric methods (if they exist) or non-parametric methods if appropriate parametric methods do not exist.*

*The Chi-Square ( $\chi^2$ ) distribution plays an important role in both parametric and non-parametric methods and many of its most important applications are explored in this paper.*

**Keywords:** Parametric Methods, Non-Parametric Methods, Parametric Chi-Square Tests, Non-Parametric Chi-Square Tests

## INTRODUCTION

Most of the statistical methods that people are familiar with are referred to as Parametric Statistics and the term is used to indicate that we have knowledge of the nature of the population from which the sample data set:  $x_1, x_2, x_3, \dots, x_n$ , which we are about to analyze, came from. For example when we use the EMPIRICAL RULE, we make the assumption that our sample data came from a normal distribution. However, when we use CHEBYCHEV'S INEQUALITY, namely:

$$P[\bar{x} - k\hat{s} \leq X \leq \bar{x} + k\hat{s}] \geq 1 - \frac{1}{k^2}, \text{ for } k > 1 \quad (1)$$

which states that the probability that a random variable  $X$  is between  $k$  standard deviations of the mean ( $\bar{x}$ ) is at least  $1 - \frac{1}{k^2}$ , the result is valid for all possible distributions of the random variable  $X$ .

Such “distribution-free” results, are called non-parametric statistics. In these nonparametric tests the parameters of the distribution continue to be important. What is not important is the nature of the distribution of the population from which the sample came from. That is these tests are valid whether the population distribution is Normal, Binomial, Uniform, Exponential, etc.

When both parametric and non-parametric methods exist for the same application it is natural to ask: Which test is preferable, the parametric or nonparametric one? The answer is: the parametric test, because for the non-parametric tests to achieve the same results (i.e. the same power) require a much larger sample (i.e. nonparametric methods are less efficient than parametric methods).

But there are many situations in which the form (or nature) of the population distribution is not well known and the nonparametric method is the only meaningful alternative. This is also the case when no parametric alternative exists.



However, even though the computations on nonparametric statistics are usually less complicated than those for parametric statistics, the calculations for many nonparametric statistics can become very tedious, when the samples are large.

Another disadvantage for most nonparametric methods is the fact that the null hypothesis ( $H_0$ ) being tested is less precise than in the parametric methods, and the conclusions drawn may be somewhat vague. But, even with these drawbacks, nonparametric statistics are very useful, and it is important to know when and where they can be used, and the conclusions, which can be drawn from their application.

The Chi-Square ( $\chi^2$ ) distribution can be used as both a parametric and non-parametric tool, as shown below:

I) The Parametric Applications of the chi-square ( $\chi^2$ ) distribution include the following tests:

- 1) Testing the hypothesis that the variance of a population is equal to a claimed value.  
(Example;  $H_0: \sigma^2 = 25$  vs.  $H_1: \sigma^2 \neq 25$ )
- 2) Testing the hypothesis that the standard deviation of a population is equal to a claimed value.  
(Example;  $H_0: \sigma = 10$  vs.  $H_1: \sigma \neq 10$ )
- 3) Testing the hypothesis that the variances of 3 or more populations are equal.  
(Example;  $H_0: \sigma_1^2 = \sigma_2^2 = \sigma_3^2 = \dots = \sigma_k^2$  vs.  $H_1$ : The k variances are not all equal)

II) The most important Non-Parametric applications of the chi-square ( $\chi^2$ ) include the following tests:

- 1) Tests on Frequencies – Are the frequencies of classes consistent with expectations?
  - a. Tests on the Frequencies of 2 classes
  - b. Tests on the Frequencies of more than 2 classes
- 2) Tests on the Independence of 2 or more characteristics of the same population (Contingency Tables) – Are 2 characteristics of the elements of a population independent of each other?
- 3) Tests on Homogeneity – Are 2 or more Independent random samples drawn from the same population?
- 4) Tests on Goodness of Fit– Does a population under investigation follow a specific Probability model (i.e. Uniform, Normal, Exponential, etc.)?
  - a. Is it a Uniform Distribution?
  - b. Is it a Normal Distribution?

But, before we start discussing both the Parametric and Non-Parametric applications of the chi-square ( $\chi^2$ ) distribution, let us first discuss briefly the “nature” of the  $\chi^2$  distribution and some of its most important characteristics, such as: The Density function of the distribution, the Shape, Expected Value and Variance of the distribution, and the method of calculating probabilities using the chi-square ( $\chi^2$ ) table (because the Density function is too complicated to allow the use of the closed-form (or analytical) method of integration).

## DISCUSSION

### The Chi-Square ( $\chi^2$ ) Distribution and Some of its Most Important Properties

$$\text{If } Y = Z_1^2 + Z_2^2 + Z_3^2 + \dots + Z_n^2 = \sum_{i=1}^n Z_i^2, \quad (2)$$

where:  $Z_1, Z_2, Z_3, \dots, Z_n$  are all Standard Normal Variables (i.e.  $\mu = 0$  and  $\sigma = 1$ ), then:

Y is said to be Chi-Square distributed with Degrees of Freedom = DOF = n (3)

If we let  $Y = \chi^2$ , (4)

then Y has a density function;  $f(y) = f(\chi^2)$  given by:

$$f(y = \chi^2) = \frac{(C^2)^{\frac{n}{2}-1} e^{-\chi^2/2}}{(2^{n/2})[\Gamma(n/2)]}, \quad 0 \leq \chi^2 < \infty, \quad (5)$$

where:  $\Gamma(n/2)$  = Tabulated Gamma Function

$$= \int_0^\infty x^{\frac{n}{2}-1} e^{-x} dx, \quad (6)$$

whose role is to keep the Area, under the  $f(\chi^2)$  function, from 0 to  $\infty$ , equal to 1 (as required by an Axiom of Probability) for all values of n, and:

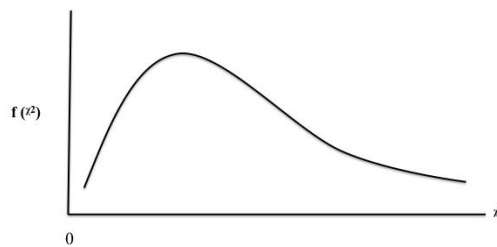
$$\Gamma(1/2) = \sqrt{\pi} \quad (7)$$

$$\Gamma(1) = 1$$

$$\Gamma(2) = 1 \square \Gamma(1) = 1$$

$$\text{and } \Gamma(n+1) = n\Gamma(n), \text{ for } n > 0$$

Equation (5) represents an entire family of curves, one for each value of n. When plotted, for a given value of n,  $f(\chi^2)$  is a positively skewed distribution, starting at  $\chi^2 = 0$  and going all the way to  $+\infty$ , as shown below:



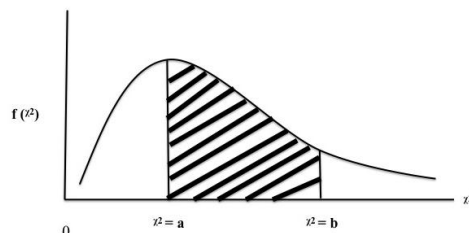
The Expected Value =  $E(\chi^2) = E(y)$ ,  $E(y^2)$ , and  $V(y) = V(\chi^2)$  are given respectively by:

$$E(y) = E(\chi^2) = \int_0^\infty y f(y) dy = DOF = n \quad (8)$$

$$E(y^2) = E[(\chi^2)^2] = \int_0^\infty y^2 f(y) dy = 2n + n^2 \quad (9)$$

$$\text{and, } V(y) = V(\chi^2) = E(y^2) - [E(y)]^2 = 2 \times DOF = 2n \quad (10)$$

It is important to emphasize that the Expected Value of a  $\chi^2$ -variable is equal to its Degrees of Freedom (DOF = n here) while its Variance is equal to  $2 \times DOF = 2n$ . To find the Probability that a  $\chi^2$ -variable is between 2 values,  $\chi^2 = a$  and  $\chi^2 = b$ , we need to integrate the  $\chi^2$  density function between these 2 values, as shown below:



$$P[a \leq \chi^2 \leq b] = \int_a^b f(\chi^2) d\chi^2 \quad (11)$$

$$= (\chi^2)_a^b = g(b) - g(a) \quad (12)$$

i.e. if we can find a function  $g(\chi^2)$  such that;

$$g'(\chi^2) = f(\chi^2) \quad (13)$$

i.e. if the derivative of  $g(\chi^2)$  is equal to  $f(\chi^2)$ , then the probability can be found by using equation (12). This “closed-form”, or “analytical” integration, is possible only if  $f(\chi^2)$  is a relatively “simple” function.

But, since the density function of the  $\chi^2$  distribution, as given by equation (5) is a complicated equation, and we can not find the corresponding  $g(\chi^2)$  function, the required integration will be performed using the  $\chi^2$  table, a copy of which is attached as Table 1.

As can be seen from this table, there is a different  $\chi^2$  - density function for each DOF = df, and the shaded area represents the value of “ $\alpha$ ” shown ( $\alpha = 0.995, \alpha = 0.990, \alpha = 0.975, \alpha = 0.950, \alpha = 0.900, \alpha = 0.100, \alpha = 0.050, \alpha = 0.025, \alpha = 0.010, \alpha = 0.005$ , in Table 1).

The Table gives us, at the intersection of the row (df) and column ( $\alpha$  value), the value of the  $\chi^2$ -variable (with the given DOF) which will make the area, under the  $f(\chi^2)$  function, from this value to  $+\infty$ , equal to the “ $\alpha$ ” of the column.

For example;

when df = 10 and  $\alpha = 0.975$ ,  $\chi_{10,0.975}^2 = 3.247$  while,

when df = 10 and  $\alpha = 0.025$ ,  $\chi_{10,0.025}^2 = 20.483$  (14)

Therefore,  $P[3.247 \leq \chi_{df=10}^2 \leq 20.483] = 0.95$  ( $0.975 - 0.025$ )

Note 1: If DOF and/or  $\alpha$  change, the results of the integration will also change.

Note 2: When  $n \geq 30$ , Probabilities can be calculated using the Normal Distribution, with: Expected Value =  $n$ , and: (15)

Standard Deviation =  $\sqrt{2n} = \sqrt{\text{variance of } \chi^2}$  (16)

Note 3: For the parametric applications of the  $\chi^2$  - distribution, we make use of the fact that:

$$\begin{aligned} \hat{s}^2 &= \text{unbiased sample variance.} \\ &= \frac{1}{n-1} \sum_{i=1}^n (x_i - \bar{x})^2 \end{aligned} \quad (17)$$

is  $\chi_{n-1}^2$  = chi-square with DOF =  $n-1$ ;

Specifically, we can show that:

$$\frac{(n-1)\hat{s}^2}{\sigma^2} = \chi_{n-1}^2 \quad (18)$$

from which we can easily show that:

$$E(\hat{s}^2) = \sigma^2 \text{ (i.e. } \hat{s}^2 \text{ is an unbiased estimator of } \sigma^2 \text{)} \quad (19)$$

and,  $V(\hat{\sigma}^2) = 2\sigma^4/(n-1)$  (20)

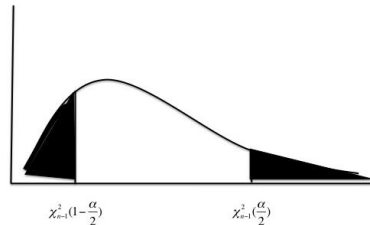
## Some of the Most Important Parametric Applications of the Chi-Square Distribution

As previously mentioned, these include:

- Testing the hypothesis that the variance of a population ( $\sigma^2$ ) is equal to a specified value ( $\sigma_0^2$ ).
- Testing the hypothesis that the standard deviation of a population ( $\sigma$ ) is equal to a specified value ( $\sigma_0$ ).
- Testing the hypothesis that the variances of three or more populations are equal to each other.

Now we can show how these three hypothesis tests are carried out and, for problems (a) and (b) we can also construct Confidence Intervals (CIs) and show their equivalency to the Hypothesis Test Solutions.

- Testing that  $\sigma^2 = \sigma_0^2$ 
  - $H_0: \sigma^2 = \sigma_0^2$  vs.  $H_1: \sigma^2 \neq \sigma_0^2$
  - Select the value of  $\alpha$  (usually  $\alpha = 0.05$  or  $\alpha = 0.01$ , or both)
  - The estimator for the parameter  $\sigma^2$  is  $\hat{\sigma}^2$  and, according to equation (18),  $\frac{(n-1)\hat{\sigma}^2}{\sigma^2} = \chi_{n-1}^2$
  - Construct a Rejection Region (RR), using the  $\chi^2$  Table with DOF = n-1; In particular obtain from the  $\chi^2$  Table the values:  $\chi_{n-1}^2\left(\frac{\alpha}{2}\right)$  and  $\chi_{n-1}^2\left(1 - \frac{\alpha}{2}\right)$  and construct the Rejection Region (RR) / Acceptance Region (AR) as shown in the figure below:



Note: The shaded area is the Rejection Region and the non-shaded area is the Acceptance Region.

- Calculate the value of the Test Statistic  $= \chi^{2*} = \frac{(n-1)\hat{\sigma}^2}{\sigma^2}$  (21)
- Compare  $\chi^{2*}$  to the Rejection Region (RR):
  - If  $\chi^{2*}$  falls Inside the RR, Reject the validity of  $H_0$
  - If  $\chi^{2*}$  falls Outside the RR, Do not Reject the validity of  $H_0$
- If  $H_0: \sigma^2 = \sigma_0^2$  is rejected, we conclude that  $\sigma^2 \neq \sigma_0^2$   
 If  $H_0: \sigma^2 = \sigma_0^2$  is not rejected, we conclude that  $\sigma^2 = \sigma_0^2$
- Testing that  $\sigma = \sigma_0$ 
  - $H_0: \sigma = \sigma_0$  vs.  $H_1: \sigma \neq \sigma_0$

- 2) Select the value of  $\alpha$  (usually  $\alpha = 0.05$  or  $\alpha = 0.01$ , or both)
- 3) The estimator of  $\sigma$  is  $\hat{\sigma}$  but we do not know the sampling distribution of  $\hat{\sigma}$ .

To solve the problem we reformulate  $H_0$  and  $H_1$  in terms of  $\sigma^2$   
(remember:  $\sigma^2 = (\sigma)^2$ , or  $\sigma = \sqrt{\sigma^2}$ ) because its estimator,  $\hat{\sigma}^2$ , is known to be  $\chi_{n-1}^2$ .

That is, we change  $H_0: \sigma = \sigma_0$  vs.  $H_1: \sigma \neq \sigma_0$  to:  $H_0: \sigma^2 = \sigma_0^2$  vs.  $H_1: \sigma^2 \neq \sigma_0^2$ , and then follow the procedure shown in problem (a) above.

#### Confidence Intervals for Problems (a) and (b)

A  $1 - \alpha$  Confidence Interval for  $\sigma^2$  is obtained from:

$$P \left[ \frac{(n-1)\hat{\sigma}^2}{\chi_{n-1}^2, \alpha/2} \leq \sigma^2 \leq \frac{(n-1)\hat{\sigma}^2}{\chi_{n-1}^2, 1-\alpha/2} \right] = 1 - \alpha, \quad (22)$$

while a  $1 - \alpha$  Confidence Interval for  $\sigma$  is obtained from:

$$P \left[ \sqrt{\frac{(n-1)\hat{\sigma}^2}{\chi_{n-1}^2, \alpha/2}} \leq \sigma \leq \sqrt{\frac{(n-1)\hat{\sigma}^2}{\chi_{n-1}^2, 1-\alpha/2}} \right] = 1 - \alpha, \quad (23)$$

by taking square roots of the quantities inside the brackets of equation (22).

The equivalency between the Hypothesis Test (HT) solution and Confidence Interval (CI) Solution is as follows:

- 1) If the hypothesized value,  $\sigma_0^2$ , falls INSIDE the limits of equation (22), the hypothesis  $H_0: \sigma^2 = \sigma_0^2$  is not rejected. Also, if the hypothesized value,  $\sigma_0$ , falls INSIDE the limits of equation (23), the hypothesis  $H_0: \sigma = \sigma_0$  is not rejected.
- 2) If the hypothesized value,  $\sigma_0^2$ , falls OUTSIDE of the limits of equation (22), the hypothesis  $H_0: \sigma^2 = \sigma_0^2$  is rejected. Also, if the hypothesized value,  $\sigma_0$ , falls OUTSIDE the limits of equation (23), the hypothesis  $H_0: \sigma = \sigma_0$  is rejected.

Note: For this equivalency to exist, the two tests (HT & CI) must be similar; i.e. a two-sided HT solution must be compared only to a two-sided CI solution.

#### c) Testing the Equality of 3 or More Population Variances

It is well known that to test the equality of 2 population variances (i.e.  $H_0: \sigma_1^2 = \sigma_2^2$  vs.  $H_1: \sigma_1^2 \neq \sigma_2^2$ ), we use:

- 1) The Normal Distribution, if  $n_1 \geq 30$  and  $n_2 \geq 30$  (and preferably  $n_1 \geq 100$  and  $n_2 \geq 100$ ) by testing:

$$H_0: \Delta\sigma^2 = \sigma_1^2 - \sigma_2^2 = 0 \text{ vs. } H_1: \Delta\sigma^2 \neq 0, \quad (24)$$

$$\text{whose estimator, } \Delta\hat{\sigma}^2 = \hat{\sigma}_1^2 - \hat{\sigma}_2^2 \quad (25)$$

is normally distributed with:

$$E(\Delta\hat{\sigma}^2) = \Delta\sigma^2 = 0, \text{ and:} \quad (26)$$

$$\sigma(\Delta \hat{s}^2) = \sqrt{\frac{2\hat{s}_1^4}{n_1-1} + \frac{2\hat{s}_2^4}{n_2-1}}, \quad (27)$$

in which the value of the test statistic:

$$Z^* = \frac{\Delta \hat{s}^2 - 0}{\sigma(\Delta \hat{s}^2)}, \text{ is compared to the Rejection Region (RR)} \quad (28)$$

$$\text{of } \pm Z_{\alpha/2}. \quad (29)$$

- 2) For all other values of  $n_1$  and  $n_2$ ,  $H_0$  and  $H_1$  are formulated as:

$$H_0: \frac{\sigma_1^2}{\sigma_2^2} = 1 \text{ vs. } H_1: \frac{\sigma_1^2}{\sigma_2^2} \neq 1 \quad (30)$$

The estimator of  $\frac{\sigma_1^2}{\sigma_2^2}$  is  $\frac{\hat{s}_1^2}{\hat{s}_2^2}$  which is distributed as  $F_{\frac{n_1-1}{n_2-1}}$ .

The test is implemented by comparing the value of the Test Statistic:

$$F^* = \frac{\hat{s}_1^2}{\hat{s}_2^2} \quad (31)$$

against the Rejection/ Acceptance Regions which are defined by:

$$F_{\frac{n_2-1}{n_1-1}}\left(\frac{\alpha}{2}\right), \text{ and} \quad (32)$$

$$F_{\frac{n_2-1}{n_1-1}}\left(1 - \frac{\alpha}{2}\right) = \frac{1}{F_{\frac{n_1-1}{n_2-1}}\left(\frac{\alpha}{2}\right)} \quad (33)$$

- 3) To test the more general case that the variances of  $k(k \geq 3)$  populations are equal, we use the BARLETT Test for HOMOGENEITY OF VARIANCE, and test the pair of hypotheses:

$$H_0: \sigma_1^2 = \sigma_2^2 = \sigma_3^2 = \dots = \sigma_k^2 \text{ vs. } H_1: \text{At least 2 variances differ} \quad (34)$$

To complete testing this pair of hypotheses we do the following:

- 1) Obtain independent samples of sizes:  $n_1, n_2, \dots, n_k$  from the  $k$  populations.
- 2) Calculate the  $k$  unbiased sample variances:  
 $\hat{s}_1^2, \hat{s}_2^2, \hat{s}_3^2, \dots, \hat{s}_k^2$ , from the  $k$  independent samples.
- 3) Calculate the Barlett Test Statistic,  $B$  from:

$$B = \frac{\left[ \sum_{i=1}^k (n_i - 1) \ln \left[ \frac{\sum_{j=1}^k (n_j - 1) \hat{s}_j^2}{\sum_{i=1}^k (n_i - 1)} \right] - \sum_{i=1}^k (n_i - 1) \ln \hat{s}_i^2 \right]}{1 + \frac{1}{3(k-1)} \left[ \sum_{i=1}^k \frac{1}{(n_i - 1)} - \frac{1}{\sum_{i=1}^k (n_i - 1)} \right]} \quad (35)$$

or:

$$B = \frac{\left[ (n_1 - 1) + (n_2 - 1) + (n_3 - 1) + \dots + (n_k - 1) \right] \ln \left[ \frac{(n_1 - 1) \hat{s}_1^2 + (n_2 - 1) \hat{s}_2^2 + \dots + (n_k - 1) \hat{s}_k^2}{(n_1 - 1) + (n_2 - 1) + (n_3 - 1) + \dots + (n_k - 1)} \right]}{1 + \frac{1}{3(k-1)} \left[ \frac{1}{n_1 - 1} + \frac{1}{n_2 - 1} + \dots + \frac{1}{n_k - 1} - \frac{1}{(n_1 - 1) + (n_2 - 1) + \dots + (n_k - 1)} \right]} - \frac{\left[ (n_1 - 1) \ln \hat{s}_1^2 + (n_2 - 1) \ln \hat{s}_2^2 + (n_3 - 1) \ln \hat{s}_3^2 + \dots + (n_k - 1) \ln \hat{s}_k^2 \right]}{1 + \frac{1}{3(k-1)} \left[ \frac{1}{n_1 - 1} + \frac{1}{n_2 - 1} + \dots + \frac{1}{n_k - 1} - \frac{1}{(n_1 - 1) + (n_2 - 1) + \dots + (n_k - 1)} \right]} \quad (36)$$

- 4) The Test Statistic  $B$ , under the  $H_0$  hypothesis of equal variances has a sampling distribution which is chi-square with  $DOF = k-1$ , or  $B = \chi_{k-1}^2$ .

- 5) The rejection region, for a given “ $\alpha$ ” value, consists of the upper tail of the  $\chi^2$  distribution (i.e.  $\chi^2_{k-1}(\alpha)$ ).
- 6) The decision rule is:
  - a. Do Not Reject  $H_0$  if  $B \leq \chi^2_{k-1}(\alpha)$
  - b. Reject  $H_0$  if  $B > \chi^2_{k-1}(\alpha)$

7) Example 1

Suppose we want to test the equality of the variances of 3 populations; i.e. we want to test the hypotheses:

$H_0: \sigma_1^2 = \sigma_2^2 = \sigma_3^2$  vs.  $H_1$ : The 3 variances are not all equal.

Assume that random sampling from the 3 populations produced the results:

Population 1:  $n_1 = 16$  and  $\hat{s}_1^2 = 10$

Population 2:  $n_2 = 21$  and  $\hat{s}_2^2 = 7$

Population 3:  $n_3 = 26$  and  $\hat{s}_3^2 = 4$

Problem: Is  $H_0$  rejected or not rejected, based on this sample information, when  $\alpha = 0.1$ ,  $\alpha = 0.05$ ,  $\alpha = 0.025$ ,  $\alpha = 0.01$ ,  $\alpha = 0.005$ ?

Solution:

Population	$n_i$	$n_i - 1$	$\hat{s}_i^2$	$(n_i - 1)\hat{s}_i^2$	$\ln \hat{s}_i^2$	$(n_i - 1)\ln \hat{s}_i^2$
1	16	15	10	150	2.302585	34.538776
2	21	20	7	140	1.945910	38.918203
3	26	25	4	100	1.386294	34.657359
		$\sum_{i=1}^3 (n_i - 1) = 60$		$\sum_{i=1}^3 (n_i - 1)\hat{s}_i^2 = 390$		$\sum_{i=1}^3 (n_i - 1)\ln \hat{s}_i^2 = 108.114$

$$\sum_{i=1}^k \frac{1}{n_i - 1} = \frac{1}{15} + \frac{1}{20} + \frac{1}{25} = \frac{20+15+12}{300} = \frac{47}{300} = 0.156667, \text{ and}$$

$$\ln \left[ \frac{\sum_{i=1}^k (n_i - 1)\hat{s}_i^2}{\sum_{i=1}^k (n_i - 1)} \right] = \ln \left[ \frac{\sum_{i=1}^3 (n_i - 1)\hat{s}_i^2}{\sum_{i=1}^3 (n_i - 1)} \right] = \ln \left[ \frac{390}{60} \right] = \ln(6.5) = 1.87180$$

Then, substituting the above quantities into equation (35) we obtain:

$$B = \frac{60(1.87180) - 108.114}{1 + \frac{1}{3(3-1)} \left( \frac{47}{300} - \frac{1}{60} \right)} = \frac{112.308 - 108.114}{1 + \frac{1}{6} \left( \frac{47}{300} - \frac{5}{300} \right)} = \frac{4.19413}{1 + \frac{1}{6} \left( \frac{42}{300} \right)} = \frac{4.19413}{1.02333} = \frac{4.19413}{1.02333} = 4.0985$$

since,  $k = 3$ ,  $\chi^2_{k-1}(\alpha) = \chi^2_2(\alpha) = 4.605$  if  $\alpha = 0.10$   
 $= 5.991$  if  $\alpha = 0.05$   
 $= 7.378$  if  $\alpha = 0.025$   
 $= 9.210$  if  $\alpha = 0.01$   
 $= 10.597$  if  $\alpha = 0.005$

Since,  $B = 4.0985 < \chi^2_2(\alpha)$ , for all of these alpha values,  $H_0$  is not rejected and we conclude that the 3 population variances are equal, or:  $\sigma_1^2 = \sigma_2^2 = \sigma_3^2$ .

## Some of the Most Important Non-Parametric Applications of the Chi-Square Distribution

The most important non-parametric applications of the Chi-Square ( $\chi^2$ ) include the following tests:

- 1) Tests on Frequencies
  - a) Tests on the Frequency of 2 classes
  - b) Tests on the Frequency of more than 2 classes
- 2) Tests on Goodness of Fit
  - a) For the Uniform Distribution
  - b) For the Normal Distribution
- 3) Tests on Independence – Contingency Tables
- 4) Tests on Homogeneity – Are 2 or more Independent random samples drawn from the same population?

We proceed to briefly discuss how each of these tests is implemented, using the Chi-Square Distribution, after some general comments which apply to all of these tests.

To perform any one of these test, we follow the general procedure below:

- 1) We formulate  $H_0$  under which Expected (or Theoretical) frequencies are determined.
- 2) We analyze sample data to establish Observed frequencies.
- 3) We compare the 2 sets of frequencies by forming corresponding differences
- 4) We specify, on the basis of these differences, a decision criterion to determine whether the Observed frequencies differ (or do not differ) significantly from the Expected frequencies.
- 5) If the differences are small and can be attributed to chance variation in random sampling,  $H_0$  is not rejected. But if the differences are large and cannot be attributed to chance variation in random sampling,  $H_0$  is rejected.

If we let:  $o_i$  represent observed frequencies,

$e_i$  represent expected frequencies, and:

$o_i - e_i$  represent the difference between corresponding observed and expected frequencies, then:

$$\text{the variable } Y = \frac{(o_1 - e_1)^2}{e_1} + \frac{(o_2 - e_2)^2}{e_2} + \dots + \frac{(o_k - e_k)^2}{e_k} = \sum_{i=1}^k \frac{(o_i - e_i)^2}{e_i} \quad (37)$$

$$\text{is a chi-square variable } (\chi^2_{\delta}) \text{ with Degrees of Freedom: } \delta = k - 1 - m \quad (38)$$

where:  $k$  = number of classes

$m$  = number of estimators calculated before expected frequencies are calculated ( $m=0,1,2,\dots$ )

**Note:** Each of the  $k$  theoretical classes must have at least 5 items in it, for the chi-square approximation to be valid. If one or more classes have Expected frequencies of fewer than 5 items, we combine classes before forming the differences  $o_i - e_i$ , and determine the Degrees of Freedom,  $\delta$ , after the regrouping of classes. When  $\delta=1$ , equation (37) is modified by introducing a Continuity Correction Factor (CCF) of  $\frac{1}{2}$  in computing the value of the variable  $Y$ , or:



$$Y = \chi^2_{\delta} = \sum_{i=1}^k \frac{(o_i - e_i)^2}{e_i} \quad \text{if } |o_i - e_i| \geq 1/2$$

$$0 \quad \text{if } |o_i - e_i| < 1/2 \quad (39)$$

### Tests on Frequencies

They consist of problems, which test the frequencies of two classes (in which the CCF of  $\frac{1}{2}$  must be used) and tests on the frequencies of more than two classes (in which the CCF of  $\frac{1}{2}$  is not used). We will illustrate the use of this test using the following example.

#### Example 2

Three coins are tossed 100 times to determine whether the 3 coins are fair, and the following data were obtained by counting the number of times we obtained 0, 1, 2, 3 heads (i.e. these are the Observed frequencies)

X	0	1	2	3
O <sub>i</sub> (X)=n(X)	14	34	36	16

The Expected frequencies are obtained by using the Binomial law, or:

$$100b\left(x, n = 3, p = \frac{1}{2}\right) = 100 \left[ \frac{n!}{x!(n-x)!} p^x (1-p)^{n-x} \right] \quad (40)$$

where:  $b\left(x, n = 3, p = \frac{1}{2}\right)$  is the Binomial distribution with  $n=3$  and  $p=1/2$ . When  $n = 3$ ,  $x = 0, 1, 2, 3$ , and from equation (40) we obtain  $P(x=0) = 1/8$ ,  $P(x=1) = 3/8$ , and  $P(x=2) = 3/8$ , and  $P(x=3) = 1/8$ , and:  
 $100P(x=0) = 100(1/8) = 12.5$ ,  $100P(x=1) = 100(3/8) = 37.5$ ,  $100P(x=2) = 100(3/8) = 37.5$ ,  $100P(x=3) = 100(1/8) = 12.5$

Therefore, the expected frequencies are:

x <sub>i</sub>	0	1	2	3
E(x <sub>i</sub> )	12.5	37.5	37.5	12.5

Then we perform the following test to check the validity of the claim:

- 1) H<sub>0</sub>: The distribution of Heads is the same as that produced by 3 fair coins vs.  
H<sub>1</sub>: The distribution of Heads is different from that produced by 3 fair coins

- 2) Let the level of significance=  $\alpha=0.05$

- 3) Define the test statistic  $Y = \chi^2_{\delta} = \chi^2_3 = \sum_{i=1}^{k=4} \frac{(o_i - e_i)^2}{e_i}$ , with  $k=4$  and  $\delta=k-1=3$  or

$$Y = \chi^2_{\delta} = \chi^2_3 = \frac{(o_1 - e_1)^2}{e_1} + \frac{(o_2 - e_2)^2}{e_2} + \frac{(o_3 - e_3)^2}{e_3} + \frac{(o_4 - e_4)^2}{e_4}$$

$$= \frac{(14 - 12.5)^2}{12.5} + \frac{(34 - 37.5)^2}{37.5} + \frac{(36 - 37.5)^2}{37.5} + \frac{(16 - 12.5)^2}{12.5}$$

$$= 0.18 + 0.32667 + 0.06 + 0.98 = 1.54667$$

- 4) **Rejection Region**: The rejection region must be the upper end of the chi-square distribution because any departure from the expected frequencies will result in an increased value for the chi-square value. Then the Rejection Region is defined by

$$\chi^2_{k-1}(\alpha) = \chi^2_3(0.05) \geq 7.815$$

- 5) Do not reject  $H_0$  because  $Y = 1.54667 < \chi_{3,0.05}^2 = 7.815$ . Therefore we conclude that the 3 coins are fair.

### Tests on Goodness of Fit

On many occasions it appears that the population under investigation follows a specific probability model, such as: Uniform, Normal, Exponential, etc. A statistical procedure exists which can be used to verify the validity of such preliminary conclusions, called a “Goodness of Fit” test and consists of the following steps:

- 1) Formulate the null hypothesis that a given population has a specific probability model (such as: Uniform, Normal, Poisson, Exponential, etc.).
- 2) Obtain a random sample from the population and analyze it to derive the observed frequencies.
- 3) Use the Theoretical distribution, specified in  $H_0$ , to generate expected frequencies, by multiplying the probability values for the classes by the sample size.
- 4) After these preliminary steps, the chi-square test for Goodness-of-Fit becomes similar to the procedure used in the test for frequencies.

We will illustrate the use of this test using the following example:

### Example 3

Suppose a die is tossed 120 times and the following results are obtained:

Number Showing	1	2	3	4	5	6	Total
Observed Occurrences	10	19	30	29	21	11	120

Are these results consistent with the hypothesis that the die is fair at  $\alpha=0.01$ ?

Following our general testing procedure, the Goodness-of-Fit test becomes

- 1)  $H_0$ : The number showing is uniformly distributed (or the die is fair) vs.  
 $H_1$ : The number showing is not uniformly distributed (or the die is not fair)
- 2) Let the level of significance  $= \alpha = 0.01$
- 3) The test statistic is:  $Y = \chi_{k-1}^2 = \chi_5^2 = \sum_{i=1}^k \frac{(o_i - e_i)^2}{e_i}$ . The observed data  $o_i$  comes from the table above while the expected data comes from the assumed Uniform distribution which implies that  $P(1) = P(2) = P(3) = P(4) = P(5) = P(6) = 1/6$ , and the expected number of occurrences for each number are equal to:  $120P(1) = 120P(2) = 120P(3) = 120P(4) = 120P(5) = 120P(6) = 20$ .

Then:

$$\begin{aligned}
 Y &= \sum_{i=1}^{k=6} \frac{(o_i - e_i)^2}{e_i} = \frac{(o_1 - e_1)^2}{e_1} + \frac{(o_2 - e_2)^2}{e_2} + \frac{(o_3 - e_3)^2}{e_3} + \frac{(o_4 - e_4)^2}{e_4} + \frac{(o_5 - e_5)^2}{e_5} + \frac{(o_6 - e_6)^2}{e_6} \\
 &= \frac{(10 - 20)^2}{20} + \frac{(19 - 20)^2}{20} + \frac{(30 - 20)^2}{20} + \frac{(29 - 20)^2}{20} + \frac{(21 - 20)^2}{20} + \frac{(11 - 20)^2}{20} \\
 &= \frac{1}{20} [(-10)^2 + (-1)^2 + (10)^2 + (9)^2 + (1)^2 + (-9)^2] = \frac{1}{20} (364) = 18.2, \text{ and } Y = \chi_5^2
 \end{aligned}$$

- 4) The rejection region is the upper tail of the chi-square distribution and is given by:  
 $\chi_5^2(0.01) \geq 15.086$

- 5) Reject  $H_0$  because  $Y = 18.2 > \chi_5^2(0.01) = 15.086$ , and conclude that the die is not fair (or that the numbers showing are not uniformly distributed).

#### Tests on Independence or “Contingency-Table Tests”

In the test on frequencies we discussed above populations and samples are classified by a single characteristic. When populations or samples are classified by two (or more) characteristics we use “tests of independence” to determine whether the characteristics are statistically independent or not. Tests for independence are also called “Contingency-Table Tests”, and the type of hypotheses being tested here are:

$H_0$ : The two characteristics are independent, vs.

$H_1$ : The two characteristics are dependent

In such tests the observed frequencies may, in general, occupy  $r$  rows and  $c$  columns, while the smallest possible “contingency table test” consists of 2 rows and 2 columns. For each observed frequency in an  $r \times c$  contingency table there is a corresponding expected frequency which is defined by the null hypothesis ( $H_0$ ) being tested. The total frequencies in each row or column are called “marginal frequencies”, while the observed and/or expected frequencies of each cell of the contingency table are called “cell frequencies”.

To test the hypotheses above we use:

$$\chi_{\delta}^2 = \sum_{i=1}^{rc} \frac{(o_i - e_i)^2}{e_i} \quad (41)$$

which is the same  $\chi^2$ -test we used in the frequency tests, except that now

$$\delta = \text{Degrees of Freedom} = (r-1)(c-1) \quad (42)$$

When  $r=2$  and  $c=2$  (smallest possible contingency table),  $\delta=1$ . For large samples the continuity correction factor can be ignored. However, for small samples the continuity correction factor of  $\frac{1}{2}$  should be used in equation (39).

#### Example 4

To test the hypothesis that high-income families choose to send their children to private universities and low-income families to state universities, 2000 families were selected at random, nationwide, and the following results were obtained (Observed data):

Income Level	University Type		Totals
	Private	Public	
Low	632	618	1,250
High	548	202	750
Totals	1,180	820	2,000

From this table it is obvious that a greater proportion of high-income families  $\left(\frac{548}{750} = 0.73\right)$  send their children to private universities than low-income families  $\left(\frac{632}{1250} = 0.51\right)$ . To determine whether this proportional difference is statistically significant or not, we will use the chi-square test for independence. But first we need to construct a table of Expected data based on our assumption that Income Level and Type of University are independent. Under this assumption we would expect the proportion of all families that send their children to private universities to be equal to:  $\frac{1,180}{2,000} = 0.59$ . Then, the Expected number of low-income families that send their

children to Private Universities is=  $\frac{1,180}{2,000}(1,250) = 738$ . The other cell values could be calculated in a similar manner. But, since the “marginal frequencies” of the Observed data are known, once one of the cell values has been found, the other cell values can be calculated by inspection. This statement explains why the Degrees of Freedom=DOF= $\delta=1$  for a 2 x 2 Contingency table. Then the Expected data become:

Income Level	University Type		Totals
	Private	Public	
Low	738	512	1,250
High	442	308	750
Totals	1,180	820	2,000

and the test of independence proceeds as follows:

- 1)  $H_0$ : Income Level and University choice are Independent, vs.  
 $H_1$ : Income Level and University choice are Dependent

- 2) Level of Significance= $\alpha=0.05$

- 3) Test Statistic:  $\chi^2_{\delta} = \sum_{i=1}^{rc} \frac{(o_i - e_i)^2}{e_i}$ , with  $\delta=(r-1)(c-1)=(2-1)(2-1)=1$

- 4) Rejection Region is defined by  $\chi^2_{\delta}(\alpha) = \chi^2_1(\alpha) = \begin{cases} 2.706 & \text{if } \alpha = 0.1 \\ 3.801 & \text{if } \alpha = 0.05 \\ 5.024 & \text{if } \alpha = 0.025 \\ 6.635 & \text{if } \alpha = 0.01 \end{cases}$

- 5) Value of test statistic

$$Y = \chi^{2*} = \frac{(632 - 738)^2}{738} + \frac{(618 - 512)^2}{512} + \frac{(548 - 442)^2}{442} + \frac{(202 - 308)^2}{308} = 99.072$$

- 6) Since  $\chi^{2*}$  falls in the rejection region (for all  $\alpha$  values shown),  $H_0$  is rejected and we conclude that family Income level and type of University selection are not independent.

Note: The Continuity Correction Factor (CCF) of  $\frac{1}{2}$  was not used (in the calculation of  $\chi^{2*}$ ) because the sample size is large (see equation 39).

### Test on Homogeneity

When we say that “things” are homogeneous we mean that they have something in common, that they are the same, or that they are equal. Here we want to answer the question: Are 2 or more independent random samples drawn from the same population or from different populations? Tests on Homogeneity can be considered an extension of the chi-square test for independence. Both of these tests are concerned with the analysis of cross-

sectional data, and both use the same test statistic:  $\chi^2_{\delta} = \sum_{i=1}^{rc} \frac{(o_i - e_i)^2}{e_i}$

But these test also have their differences, which mainly are due to the types of problems solved in each case:

In tests of Independence a single sample is obtained from one population and the problem is to determine whether two characteristics of the elements of the population, from which the sample came from, are independent of each other.

In tests of Homogeneity, however, we have obtained 2 or more independent samples and the problem is to determine whether these samples come from the same population or from different populations.

#### Example 5

Three random samples of students are taken at a University. The first sample consists of 100 graduate students, the second of 100 seniors, and the third of 100 sophomore students. Each group is asked to grade the course instruction they are receiving at the University as:

Excellent, Good, or Average. The following results were obtained (Observed data):

Student Classification	Instruction Quality			Totals
	Excellent	Good	Average	
Graduate	77	12	11	100
Senior	73	7	20	100
Sophomore	85	10	5	100
Totals	235	29	36	300

The null hypothesis being tested here is:  $H_0$ : The 3 samples come from the same population (i.e. the 3 classifications of students are homogeneous in their opinion about quality of instruction). If this hypothesis is True, then the best estimates for the proportions specifying:

“Excellent instruction”, “Good instruction”, and “Average instruction”, respectively should be:  $\frac{235}{300}$ ,  $\frac{29}{300}$ , and

$\frac{36}{300}$ . Therefore, for the 100 Graduate students, the Expected frequencies for the 3 categories become:

$\frac{235}{300}(100) = 78.33$ ,  $\frac{29}{300}(100) = 9.67$ , and:  $\frac{36}{300}(100) = 12$  and similarly for the 100 senior and 100 sophomore students.

Therefore, the Expected data become:

Student Classification	Instruction Quality			Totals
	Excellent	Good	Average	
Graduate	78.33	9.67	12.00	100
Senior	78.33	9.67	12.00	100
Sophomore	78.33	9.67	12.00	100
Totals	234.99	29.01	36.00	300

and the test for homogeneity becomes:

- 1)  $H_0$ : The 3 samples are drawn from the same population, vs.  
 $H_1$ : The 3 samples are drawn from different populations

- 2) Level of significance= $\alpha=0.05$

- 3) Test statistic=  $\chi^2_{\delta} = \sum_{i=1}^{rc} \frac{(o_i - e_i)^2}{e_i} = \sum_{i=1}^{rc} \frac{o_i^2}{e_i} - n = \sum_{l=1}^9 \frac{o_l^2}{e_l} - 300$ , (43)

with  $\delta=(r-1)(c-1)=(3-1)(3-1)=4$

4) Rejection Region is defined by  $\chi^2_{\delta}(\alpha) = \chi^2_4(\alpha = 0.05) \geq 9.488$

5) Value of test statistic

$$Y = \chi^2 = \left( \frac{77^2}{78.33} + \frac{12^2}{9.67} + \frac{11^2}{12.0} \right) + \left( \frac{73^2}{78.33} + \frac{7^2}{9.67} + \frac{20^2}{12.0} \right) + \left( \frac{85^2}{78.33} + \frac{10^2}{9.67} + \frac{5^2}{12} \right) - 300 = 311.75 - 300 = 11.75$$

6) Since  $\chi^2_4 = 11.75 > \chi^2_4(0.05) = 9.488$ ,  $H_0$  is rejected and we conclude that “different level students” have “different opinions” concerning the quality of instruction at the University.

Note1: The definition of  $\chi^2_{\delta} = \sum_{i=1}^{rc} \frac{(o_i - e_i)^2}{e_i}$  can be shown to be equal to  $\sum_{i=1}^{rc} \left( \frac{o_i^2}{e_i} \right) - n$ . This equivalent formula was used in the calculation of  $\chi^2$ , and it appears to be somewhat easier because it avoids having to take differences between Observed and Expected frequencies before squaring.

Note2: If the level of significance was changed from  $\alpha=0.05$  to  $\alpha=0.01$ , then  $\chi^2_4(0.01) = 13.277$ , and  $H_0$  is not rejected and we would conclude that the 3 samples came from the same population (or that the 3 classification of students are homogeneous in their opinion about the quality of instruction).

## CONCLUSIONS

The Chi-square ( $\chi^2$ ) distribution is very versatile and has many applications, some of them parametric and some of them nonparametric. It is used, as a parametric test, to solve Hypothesis Test Problems and Construct Confidence Intervals for the population parameter  $\sigma^2$  (and also  $\sigma$ ) because the sampling distribution  $\hat{s}^2$ , which is the estimator if  $\sigma^2$ , is distributed as a chi-square variable with  $n-1$  degrees of freedom ( $\chi^2_{n-1}$ ). But the chi-square ( $\chi^2$ ) distribution can also be used as a non-parametric test (or distribution-free statistic) to perform the following tests:

Tests on Frequencies

Goodness-of-Fit Tests

Test on Independence or Contingency-Table Tests

Tests on Homogeneity (are 2 or more independent random samples drawn from the same population or from different populations)

Most of the parametric tests we have discussed (test on  $\sigma^2$  and  $\sigma$  for example) are well known but the test on the equality of 3 or more population variances, using the Barlett B Statistic, is not.

We have discussed many nonparametric tests in which the parameters of the distribution continue to be important but the nature of the distribution, from which the sample data we used in our analysis came from, is not important and is not needed to perform these tests. This is in contrast to the parametric tests, which depend very much on the nature of the population from which our data set came from.

Some of the non-parametric tests have corresponding parametric tests; but the majority of them do not.

Examples were included, for all the tests discussed, to make their understanding and applications easier.

The non-parametric methods can solve the same type of problems that parametric methods can solve (but with reduced efficiency) and can also solve additional problems when no parametric methods are available.

The use of a statistic software tool, like MINITAB, simplifies the application of these tests considerably. Unfortunately, not every non-parametric test is supported by MINITAB, but most parametric tests are.

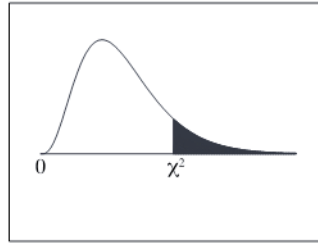
MINITAB uses the p-value (i.e. observed level of significance), instead of  $\alpha$  (the a-priori level of significance), to reject or not to reject a hypothesis.

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## APPENDIX

### Table 1: Chi-Square Distribution Table



The shaded area is equal to  $\alpha$  for  $\chi^2 = \chi^2_{\alpha}$ .

$df$	$\chi^2_{.995}$	$\chi^2_{.990}$	$\chi^2_{.975}$	$\chi^2_{.950}$	$\chi^2_{.900}$	$\chi^2_{.100}$	$\chi^2_{.050}$	$\chi^2_{.025}$	$\chi^2_{.010}$	$\chi^2_{.005}$
1	0.000	0.000	0.001	0.004	0.016	2.706	3.841	5.024	6.635	7.879
2	0.010	0.020	0.051	0.103	0.211	4.605	5.991	7.378	9.210	10.597
3	0.072	0.115	0.216	0.352	0.584	6.251	7.815	9.348	11.345	12.838
4	0.207	0.297	0.484	0.711	1.064	7.779	9.488	11.143	13.277	14.860
5	0.412	0.554	0.831	1.145	1.610	9.236	11.070	12.833	15.086	16.750
6	0.676	0.872	1.237	1.635	2.204	10.645	12.592	14.449	16.812	18.548
7	0.989	1.239	1.690	2.167	2.833	12.017	14.067	16.013	18.475	20.278
8	1.344	1.646	2.180	2.733	3.490	13.362	15.507	17.535	20.090	21.955
9	1.735	2.088	2.700	3.325	4.168	14.684	16.919	19.023	21.666	23.589
10	2.156	2.558	3.247	3.940	4.865	15.987	18.307	20.483	23.209	25.188
11	2.603	3.053	3.816	4.575	5.578	17.275	19.675	21.920	24.725	26.757
12	3.074	3.571	4.404	5.226	6.304	18.549	21.026	23.337	26.217	28.300
13	3.565	4.107	5.009	5.892	7.042	19.812	22.362	24.736	27.688	29.819
14	4.075	4.660	5.629	6.571	7.790	21.064	23.685	26.119	29.141	31.319
15	4.601	5.229	6.262	7.261	8.547	22.307	24.996	27.488	30.578	32.801
16	5.142	5.812	6.908	7.962	9.312	23.542	26.296	28.845	32.000	34.267
17	5.697	6.408	7.564	8.672	10.085	24.769	27.587	30.191	33.409	35.718
18	6.265	7.015	8.231	9.390	10.865	25.989	28.869	31.526	34.805	37.156
19	6.844	7.633	8.907	10.117	11.651	27.204	30.144	32.852	36.191	38.582
20	7.434	8.260	9.591	10.851	12.443	28.412	31.410	34.170	37.566	39.997
21	8.034	8.897	10.283	11.591	13.240	29.615	32.671	35.479	38.932	41.401
22	8.643	9.542	10.982	12.338	14.041	30.813	33.924	36.781	40.289	42.796
23	9.260	10.196	11.689	13.091	14.848	32.007	35.172	38.076	41.638	44.181
24	9.886	10.856	12.401	13.848	15.659	33.196	36.415	39.364	42.980	45.559
25	10.520	11.524	13.120	14.611	16.473	34.382	37.652	40.646	44.314	46.928
26	11.160	12.198	13.844	15.379	17.292	35.563	38.885	41.923	45.642	48.290
27	11.808	12.879	14.573	16.151	18.114	36.741	40.113	43.195	46.963	49.645
28	12.461	13.565	15.308	16.928	18.939	37.916	41.337	44.461	48.278	50.993
29	13.121	14.256	16.047	17.708	19.768	39.087	42.557	45.722	49.588	52.336
30	13.787	14.953	16.791	18.493	20.599	40.256	43.773	46.979	50.892	53.672
40	20.707	22.164	24.433	26.509	29.051	51.805	55.758	59.342	63.691	66.766
50	27.991	29.707	32.357	34.764	37.689	63.167	67.505	71.420	76.154	79.490
60	35.534	37.485	40.482	43.188	46.459	74.397	79.082	83.298	88.379	91.952
70	43.275	45.442	48.758	51.739	55.329	85.527	90.531	95.023	100.425	104.215
80	51.172	53.540	57.153	60.391	64.278	96.578	101.879	106.629	112.329	116.321
90	59.196	61.754	65.647	69.126	73.291	107.565	113.145	118.136	124.116	128.299
100	67.328	70.065	74.222	77.929	82.358	118.498	124.342	129.561	135.807	140.169



# PART-TIME OR NASCENT ENTREPRENEURS? ACADEMIC HYBRID ENTREPRENEURSHIP

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## ABSTRACT

*Hybrid entrepreneurs (HEs) who are active as entrepreneurs but do not support themselves primarily by entrepreneurship represent a significant share of all entrepreneurial activity. In order to better understand the distinction between HEs as nascent entrepreneurs and HEs as part-time entrepreneurs with no full-time entrepreneurial intentions, we explore (1) the profiles of academic HEs, (2) their motivations and (3) their future ambitions in terms of business growth and full-time entrepreneurship. With data collected from 848 academic HEs we find that only a small minority considers full self-employment likely in the near future and that self-fulfillment is the most significant motive. The results suggest that persistent hybrid entrepreneurship should be viewed as a form of entrepreneurship in its own right.*

**Keywords:** hybrid entrepreneurship, nascent entrepreneurship, academic entrepreneurship, survey, intentions

## INTRODUCTION

Entrepreneurship research tends to view entrepreneurs as a group apart: an individual either is an entrepreneur or not. Yet there is ample evidence that the categories are not exclusive. Many nascent entrepreneurs, i.e. individuals in the process of starting a new venture, are simultaneously also in full-time employment (Reynolds et al. 2004, Gelderen et al. 2005, Bosma et al. 2007). Folta, Delmar and Wennberg (2010) use the label hybrid entrepreneurship for individuals who mix entrepreneurship and wage employment. Lith (2010) defines part-time entrepreneurship as entrepreneurship by individuals who support themselves primarily by other means. Petrova's (2011) study on part-time entrepreneurs focuses on nascent entrepreneurship and defines part-time status through hours worked on business activities. Hybrid entrepreneurs (HEs) represent a significant share of all entrepreneurial activity (Folta et al. 2010), and as such, hybrid entrepreneurship is an important societal phenomenon. At the same time it is perhaps one of the least understood aspects of entrepreneurship (Reynolds et al. 2004), and further research is needed (Burke et al., 2008; Folta et al., 2010).

In our study we define hybrid entrepreneurs as individuals who are active as entrepreneurs but do not support themselves primarily by their enterprise. National studies (Akola et al. 2007, Entrepreneurship Review 2010) show that as much as 4 % of the employed workforce and 4 % of the non-employed population (e.g. students, pensioners) are also involved in entrepreneurial activities on part-time bases. In practice, for every five full-time entrepreneurs in Finland there are two part-time entrepreneurs. It seems unlikely that such a large proportion of the population is in fact using hybrid entrepreneurship as an entry strategy for full-time entrepreneurship. Hence, there is a need to better understand the distinction between HEs as nascent entrepreneurs and HEs as part-time entrepreneurs with no full-time entrepreneurial intentions.

In this paper we have three specific objectives. In order to better understand to what extent is hybrid entrepreneurship in fact an entry strategy into full-time entrepreneurship, we explore (1) the profiles of academic HEs, (2) their motivations and (3) their future ambitions in terms of business growth and full-time entrepreneurship.

## BACKGROUND

Gruenert's (1999) examination of second job entrepreneurs suggests that HEs may have a higher education level than employees on average, and that they may be slightly older. Gruenert (1999) also found that second job entrepreneurs include almost twice as many men as women, and that they are likely to have higher salaries than employees on average. Lith (2010), using Finnish data, found more women than men as part-time entrepreneurs but also that salaries of HEs are higher than those of employees on average. Varamäki et al. (2012) found in regional study that part-time entrepreneurs' age was comparable to that of fulltime entrepreneurs, but that their education level was higher. Varamäki et al.'s (2012) results also confirm Gruenert's (1999) results on gender: two thirds of the part-time entrepreneurs were men. In all three studies (Gruenert, 1999; Lith, 2010 and Varamäki et al., 2012) service industries and expert services in particular are the most common fields of business for HEs.

Kirkwood (2009) suggests that there are four key drivers for entrepreneurial motivation: desire for independence, monetary motivations, work-related motivation and family-related motivation. However, as her study focused at business founders who employ at least one other person, and are in fact fully employed in their own firms, other motivations should be considered for HEs. Petrova (2011) argues that part-time entrepreneurship may be explained uncertainty about entrepreneurial ability. In another study (Petrova 2012) she finds that credit constraints, i.e. the need to support oneself by salaried employment while creating the new venture, are an insufficient explanation, and suggests that risk aversion be considered a possible rationale for part-time efforts. In studies viewing hybrid entrepreneurship primarily as an entry strategy, focus is generally on impact of part-time rather than full-time entry on venture success (e.g. Gelderen et al., 2005) and in studies examining occupational choice between employed work and self-employment the choice is viewed as a dichotomous variable (Cassar, 2006). Hence the motivations and drivers of entrepreneurs whose efforts are part-time on permanent basis remain largely unexplored.

Yet starting a part-time business is not necessarily indicative of a desire to become a full-time entrepreneur. For example Akola et al. (2007) find in their sample of journalists and interpreters that about 40% plan to continue on part-time basis. In other words, starting an enterprise cannot be equated with becoming self-employed. According to Segal et al. (2005) the intention to become self-employed is a function of tolerance for risk, perceived net desirability and feasibility of self-employment. Douglas and Shepherd's (2002) model of career choice as function of maximizing utility in terms of work effort, risk, independence and income suggests that intention to become an entrepreneur is driven primarily by attitudes to risk and independence. Permanent part-time entrepreneurship may hence be a question of optimizing; some HEs may be using their salary income to avoid the full risks of entrepreneurship while partly pursuing the independence as second job entrepreneurs.

Even the HEs' with no full-time entrepreneurial intention may have growth ambitions. In Davidsson's (1991) model actual growth in a small business is determined by growth motivation of the entrepreneur. Motivation in turn is determined by ability, need and opportunity as perceived by the entrepreneur. Teruel and de Witt (2011) suggest that entrepreneurs' interest in growth may be influenced by their motivation for becoming an entrepreneur in the first place. If entrepreneurship is driven by income motivation, growth is more probably viewed as desirable, whereas motivations of self-determination and self-actualization are less likely to promote interest in growth (see also Cassar, 2007). Mungaray and Ramirez-Urquidy's (2011) results suggest that part-time efforts may also relate a focus on non-pecuniary aspects rather than profit maximization,

Entrepreneurship may also be motivated by push rather than pull factors (e.g. Moore & Mueller 2002, Kirkwood 2009, cf. Dawson & Henley 2012), i.e. an individual may find that self-employment is the only viable option, or may be pushed towards self-employment by dissatisfaction with salaried employment. For salaried HEs part-time entrepreneurship may play a similar role; an employed individual may feel insecure about the continuity of the job and start a part-time business as career insurance. At the same time, as entrepreneurs have higher satisfaction levels than employees (e.g. van Praag & Versloot, 2007), hybrid entrepreneurship may increase HEs' overall satisfaction by providing an outlet for entrepreneurial energies and leading to increased propensity to remain in employment. Grilo and Irigoyen (2006) have noted that in the EU a higher percentage of the population expresses a preference for self-employment than actually becomes self-employed; in Finland, they found 26.04 % of the active population expressing such preference as opposed to only 16.67 % having self-

employment status. This suggests there is considerable latent entrepreneurship potential in Finland. It is not inconceivable that this potential is partially realized in hybrid entrepreneurship.

Cassar (2006) notes that studies on the choice between employed work and self-employment have failed to examine the intended scale of venturing. He argues that an entrepreneur's opportunity costs are a significant determinant of intended scale of venturing activity. The greater the existing opportunities forsaken in order to undertake a new venture, the larger the scale of the intended new business should be. Cassar's (2006) results show that current household income and human capital (with managerial experience as proxy), have an impact on the predicted future income from the new venture; the nascent entrepreneurs with greater income plan bigger ventures. While Cassar's focus is on intended income from the new venture, a similar argument can be made with respect to HEs: their scale of venturing, i.e. the choice between continuing as HEs rather than becoming fully self-employed, may hinge on opportunity costs. Academically educated individuals have not only greater human capital to invest in their ventures but also greater potential for rewarding employment.

## DATA AND METHODOLOGY

No ready databases on HEs are available. Previous studies (Varamäki et al. 2012, Akola et al. 2007, Gruenert 1999) have shown that HEs tend to be more highly educated than micro-entrepreneurs on average. The target group of the study consisted of academic members of two professional and labour market organisations in Finland, namely *The Finnish Association of Business School Graduates* and *Academic Engineers and Architects*. The data was collected through an internet survey in March 2014, requesting responses from members who identify themselves as HEs. A total of 848 responses were received. 79% of the respondents were HEs beside salaried employment. 15% of the HEs were retired, 5% were students and 5% were unemployed.

68% of the respondents were men. The mean age of the respondents was 47.6 years. Most respondents' field of business is expert services (64%). 13% are involved in other services, 9 % each in primary production and trade, and finally, 4 % in manufacture and construction. The number of expert service providers is somewhat higher than in for example Varamäki et al.' (2012) data, but this is understandable, as the target group of the present study is limited to academic HEs, whose skillset naturally lends itself to expert service provision. The gender ratio, on the other hand, is very similar to that of previous studies by Gruenert (1999) and Varamäki et al. (2012), although in contrast to Lith's (2010) analysis.

In addition to descriptive statistics, cross-tabulation, chi-square test, t-test, ANOVA and factor analysis are used in data analysis.

## RESULTS

The respondents' experience of hybrid entrepreneurship was about nine years on average (Table 1). 15 % of the respondents had been engaged in part-time entrepreneurship less than two years, but more than half (53.5 %) had already more than five years of part-time entrepreneurship experience. Hence, part-time entrepreneurial efforts cannot be described as temporary or short-term. Rather, they are in most cases of considerable duration. Similar results were found by Varamäki et al. (2012); in their data the average length of hybrid activities was slightly over ten years.

Men had on average a longer HE history (ten years) than women (eight years) ( $p=.002$ ). As could be expected, the duration of HE activity also correlated with age; in the age group 55 years or more, the average was 14 years, in the age group 45 to 54 ten years and for those under 45 five years.

**Table 1. Duration of part-time entrepreneurship**

	<b>n</b>	<b>%</b>
less than two years	127	15.0
2–5 years	267	31.5
6–10 years	185	21.8

11–20 years	161	19.0
21–30 years	83	9.8
over 30 years	25	2.9
Total	848	100.0

Only 6 % of the respondents consider it very likely that they will become self-employed within the next three years; 48% view the possibility as very unlikely (Table 2). Over long term (“at some point in your career”), full-time entrepreneurship is deemed very likely by 16 %. Notwithstanding full-time self-employment, 51 % of the respondents aim for growth in their business activities, with 6 % seeking strong growth.

**Table 2. Probability of becoming a fulltime entrepreneur**

	1=very improbable	2	3	4	5=very probable	aver.	n
How probable is it that you will become a fulltime entrepreneur within the next three years?	48 %	22 %	15 %	10 %	6 %	2.0	816
How probable is it that you will become a fulltime entrepreneur at some point in your career?	23 %	19 %	22 %	20 %	16 %	2.9	777

The HEs’ estimate of the probability of fulltime entrepreneurship within the next three years correlates with their ambitions for growth (Table 3). Only two percent of the HEs seeking strong growth rate their likelihood of fulltime entrepreneurship in the near future as improbably (1 or 2 on the scale of 1=very improbable to 5=very probable). However, it is noteworthy that only 21 % of the same group rate fulltime entrepreneurship as probable (4 or 5). Hence, nearly four fifths of the HEs seeking strong growth are oriented to growing a part-time business rather than to fulltime self-employment.

**Table 3. Fulltime entrepreneurship probability and growth objectives**

	<i>How probable is it that you will become a fulltime entrepreneur within the next three years?</i>	
<i>What are your objectives for growth of turnover in your business activities?</i>	improbable (1 or 2)	probable (4 or 5)
I aim for strong growth	2 %	21 %
I aim for growth according to opportunities	38 %	60 %
I aim to maintain current level	53 %	17 %
I plan to wind the business down	7 %	2 %
	p=0.000	

Looking at the HEs’ motives, the most important motive for was self-fulfillment. Only nine percent view part-time entrepreneurship as an intermediary step to self-employment, and eight percent as a means of testing their business idea. Hence, hybrid entrepreneurship is explicitly an entry strategy for only a part of HEs. 11 % of the HEs are certain they will never become full-time entrepreneurs.

A closer examination shows that strong growth aims are connected with motives of self-fulfillment and professional development. A statistically very significant correlation ( $p=.000$ ) is also found between the likelihood of self-employment within the next three years and items concerned with self-fulfillment (.190), professional development (.208), hybrid entrepreneurship as a back-up plan in case of unemployment (.247) and items measuring genuine nascent entrepreneurship, i.e. testing business idea and intermediary step (.470 and .573 respectively).

Factor analysis reveals three main motivational categories for HEs (Table 4). *Testing* ( $\alpha=.808$ ) refers to nascent entrepreneurship, identifying a group of HEs for whom part-time entrepreneurship is indeed a temporary phase prior to full-time entrepreneurship. *Fulfillment-seeking* ( $\alpha=.805$ ) views entrepreneurship as an opportunity

for doing interesting things and finding self-fulfillment. *Security-seeking* ( $\alpha=.650$ ) focuses on entrepreneurship as a back-up plan in case of unemployment or threat of unemployment.

**Table 4. Items for Testing, Fulfillment-seeking and Security-seeking.**

Sum variable	items
Testing ( $\alpha=0.808$ )	<ul style="list-style-type: none"> <li>- I would rather be a full-time entrepreneur than in full-time salaried employment</li> <li>- As a part-time entrepreneur, I am testing a business idea with a view to full-time entrepreneurship</li> <li>- Part-time entrepreneurship is an intermediate phase before full-time entrepreneurship</li> <li>- I am sure I will never be a full-time entrepreneur (reversed)</li> </ul>
Fulfillment-seeking ( $\alpha=0.805$ )	<ul style="list-style-type: none"> <li>- For me entrepreneurship is primarily a means to do things that interest me</li> <li>- The most important thing about entrepreneurship is the opportunity for self-fulfillment</li> </ul>
Security-seeking ( $\alpha=0.650$ )	<ul style="list-style-type: none"> <li>- The business is for me partly a back-up plan in case of unemployment</li> <li>- Insecurity about continuing employment had a strong influence on my wish to start a part-time business.</li> </ul>

Age has a statistically very significant correlation with testing and security-seeking. In the age group 35 years old or less, average score for testing is 3.3 but for the age group 55 years or more, only 2.4. Previous studies have shown that in general older people are less likely to engage in entrepreneurial activity than younger individuals (Curran and Blackburn, 2001; Hart et al., 2004; Kautonen, 2008), although the ability to establish and run a business is higher at an older age, the motivation for entrepreneurial behaviour is significantly lower. Further, the youngest age cohort (35 years old or less) scores only 2.6 for security-seeking, which peaks in the age group 45–54 years at 3.2. Interestingly, although the Finnish labour market favours younger job-seekers under 50, the age group of 55 years or more scores lower on security-seeking (average 2.7) than the medium age groups of 35–44 (2.9) and 45–54. This suggests that the oldest cohort does not view entrepreneurship as credible form of career insurance. There are, however, previous studies which have in general found that push factors, e.g. lack of paid employment opportunities in the labour market or dissatisfaction with salary work, are more significant for older people to engage in entrepreneurial activities than for younger individuals (e.g. Walker and Webster, 2007; Akola, 2009; cf. Kautonen, 2008).

Testing correlates negatively with the duration of HE activities ( $r= -0.229$ ,  $p=0.000$ ). For HEs with less than two years of part-time entrepreneurship, the average for testing is 3.4 but for HEs with over 30 years of part-time entrepreneurship only 2.2. A similar relationship is found with fulfillment-seeking ( $r=0.169$ ,  $p=0.000$ ). The average values for testing, fulfillment-seeking and security seeking correlate also with the average hours per week spent on entrepreneurial activities. Interestingly, HEs spending more than ten hours per week on average in their business activities get an average of 3.0 on security-seeking, 3.3 on testing and 4.3 on fulfillment-seeking, the corresponding values for HEs spending one hour per week at most being 2.7, 2.8 and 3.7 respectively. Also the regularity of time spend correlates with the sum variables of testing and fulfillment-seeking: HEs putting in time on entrepreneurial activities on daily bases have higher values on fulfillment-seeking (4.2) than on testing (3.4). The same relationship holds for HEs spending time on weekly basis (2.9 and 3.8 respectively).

These results suggest first, that HEs motivated by fulfillment-seeking are more active and more industrious in their part-time entrepreneurship activities than those seeing themselves as future fulltime entrepreneurs, and second, that HEs using part-time entrepreneurship as a stepping stone towards fulltime entrepreneurship make up their minds relatively quickly. Hence, the HEs still engaged in part-time entrepreneurial activities after several years are more probably in business for the pleasure of being in business rather than with the view of becoming fulltime entrepreneurs. However, looking at the HEs' interest in strong growth, fulfillment-seeking averages are actually higher (4.3) than testing averages (4.0), demonstrating that motives of self-fulfillment are at least as likely to fuel ambitions for entrepreneurial activities as plans for fulltime entrepreneurship. Moreover, younger HEs were more interested in growth, in line with some previous studies (e.g. Gray, 2004) but contradictory to some other studies (e.g. Alsos and Kolvereid, 1999; Westhead and Wright, 1998; Kautonen, 2008).

## DISCUSSION

In this paper we have sought to explore to what extent hybrid entrepreneurship is in fact an entry strategy into full-time entrepreneurship. In order to gain a better understanding of this, we have examined the profiles of academic HEs, their motivations and their future ambitions in terms of business growth and full-time entrepreneurship.

The personal profiles of academic HEs largely fit the expectations formed on basis of earlier research. Men are twice as likely to have part-time entrepreneurial activities (see also Grunert, 1999; Varamäki et al., 2012; cf. Lith, 2010). Services and specifically expert services are the most common field of business, which is in line with other studies both in the field of hybrid entrepreneurs (e.g. Lith, 2010; Gruenert, 1999) and academic entrepreneurs (e.g. Heinonen et al., 2006; Akola, 2007, 2009). A clear majority of the HEs has a lengthy history of hybrid entrepreneurship. On average, the HEs have been engaged in entrepreneurial activities for nine years. Over half of them have been active in entrepreneurship for more than five years. Only six percent of the HEs consider it very likely that they will become self-employed within the next three years. Furthermore, nearly four fifths of the HEs seeking strong turnover growth are oriented to growing a part-time business rather than to fulltime self-employment.

The responses of the HEs in our study show evidence of a three-fold division in motivations. Testing a business idea prior to becoming a fulltime entrepreneur, i.e. the classic motivation assigned to nascent entrepreneurs who remain in salaried employment as they start their business, is indeed present but not for all HEs. In our data high scores on testing motivations tend to be associated with younger HEs, shorter duration of part-time entrepreneurship and medium labour input in entrepreneurial activities. Fulfillment-seeking motivations seem to lead to highest labour inputs, whereas security-seeking motivations are associated with least efforts. Taken together our results suggest that HEs motivated by fulfillment-seeking are quite active and industrious in their entrepreneurship activities, on one hand, and that HEs actually aiming to fulltime entrepreneurship are relatively quickly able to decide whether their business idea will work.

Our study shows unequivocally that hybrid entrepreneurship is often a persistent mode of entrepreneurship. Most HEs do not view themselves as nascent entrepreneurs, i.e. future full-time entrepreneurs. Yet it appears that HEs represent a significant share of entrepreneurial activity in Finland and, presumably, in other countries with similar entrepreneurial dynamics (e.g. Bosma et al., 2008). However, as the HEs who are interested in strong growth get higher scores for fulfillment-seeking than for testing, there is reason to believe that motives of self-fulfillment can also lead to ambitious objectives for persistent HEs; the goals are simply not related to fulltime entrepreneurship. According to Folta et al. (2010) hybrid entrepreneurship as an entry strategy should be viewed as a distinct process. In a similar vein, we suggest that persistent HEs should be viewed not only as nascent entrepreneurs but as a form of entrepreneurship in its own right. The length of time HEs have remained on part-time status, together with the attitude towards fulltime entrepreneurship shown by many HEs, demonstrates that hybrid entrepreneurship is often not a temporary state. While many HEs are in fact nascent entrepreneurs aiming for full self-employment and, in some cases, entrepreneurship employing others as well, a significant number of HEs is in business on permanent part-time basis, with no interest in full-time status. Some are out to get “the best of both worlds” – in other words, they combine the relative security of salaried employment with the self-fulfillment of entrepreneurship. Some see part-time entrepreneurship as an insurance policy against career pitfalls. Research on entrepreneurship and occupational choice should consider persistent hybrid entrepreneurship as a distinct category of entrepreneurship. Failing to take into account the fact that starting an enterprise does not equate with becoming self-employed at some point can give rise to misleading conclusions in studies on entrepreneurial activities on one hand, and mask the actual contribution of HEs on the other.

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# IMPLICATIONS OF SOCIAL MEDIA FOR MARKETING COMMUNICATIONS

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## ABSTRACT

*The field of marketing communications studies is often called on to close the gap between marketing and computer-mediated studies. This paper engages with the concept of social media in the design and implementation of marketing communication programmes, particularly in the UK Fashion sector. The paper goes on to conclude, rather sceptically, that understandings of the various nuances of social media platforms could engender effective customer retention programmes. It also offers a new way of thinking about customer engagement, incorporating social media platforms.*

**Keywords:** social networks, customer retention, brand community, customer experience, customer engagement

## INTRODUCTION AND CONTEXT

In recent years, social media has emerged as a topic of great interest to scholars and practitioners alike (see for example Hennig-Thurau *et al.*, 2010; Hoffman and Novak, 2011; Kaplan and Haenlein, 2010). The tremendous success of social media has been witnessed in terms of adoption and usage, caused by a paradigm shift in the way people communicate, express ideas and thoughts, and even how they interact with companies (Kaplan and Haenlein, 2010; Mangold and Faulds, 2009; Palmer and Koenig-Lewis, 2009). Traditionally, enterprises maintained control over relationship activities while customers were passive “receivers” (Christodoulides *et al.*, 2011; Hennig-Thurau *et al.*, 2010; Jahn and Kunz, 2012). Web 2.0 technologies have transferred power over brands directly to consumers, turning them into empowered, educated, technology-savvy and informed customers (Constantinides and Fountain, 2008; Constantinides, 2008). Thus, they have placed the consumer in the ‘driving seat’ and forced managers to concentrate their efforts on managing the dialogue, not the customer (Baird and Parasnis, 2011b). More importantly, the cultural shift in the customer-centric direction that has occurred (see Bernoff and Li, 2008; Peppers and Rogers, 2011; Sheth *et al.*, 2000) has led to a transformation in organisational focus from transaction-orientated to relationship-orientated entities (Christopher *et al.*, 2002; Egan, 2011; Godson, 2009; Gronroos, 1991; Gummesson, 2008).

This new marketing communication reality presents new challenges and opportunities for businesses which perceive of social media as a new tool for creating a better customer experience (Baird and Parasnis, 2011b; Palmer, 2010; Stone, 2011) and for increasing brand awareness through creating excitement and amplifying word-of-mouth (Brown *et al.*, 2007; Chevalier and Mayzlin, 2006; Kozinets *et al.*, 2010). It also represents a means for improving corporate search engine optimisation, increasing sales, and building, nurturing and maintaining lasting relationships with customers (Peppers and Rogers, 2011; Tuten and Solomon, 2013).

While the importance of social media is remarkable, a few studies to date have explored its role and impact on customer equity (Dann and Dann, 2011; Kim and Ko, 2012), purchase intention (Hutter *et al.*, 2013; Kim and Ko, 2010), brand loyalty (Erdogmus and Cicek, 2012, Laroche *et al.*, 2013), and the customer-brand relationship (Baird and Parasnis, 2011b; Hennig-Thurau *et al.*, 2010; Jahn and Kunz, 2012). What these studies have in common is the assumption that social media are platforms, online applications and media-enabled venues for brand activities, facilitating not only consumer-to-consumer communications but brand-customer interactions as well. Furthermore, these studies tend to focus on customer retention to some degree. For instance, Laroche *et al.* (2013) provide a helpful discussion that reveals the importance of social media brand communities in fostering customer relationships and loyalty. They further note that “brand communities established on social media have positive effects on customer/product, customer/brand, customer/company, and customer/other customers relationships, which in turn have positive effects on brand trust, and trust has positive effects on brand loyalty” (p.76). Kim and Ko’s (2012) work suggests that as effective marketing communication methods, social media activities “improve customer equity drivers by strengthening customer relationship and creating purchase intent” (p.1484). These studies allude to the possibility of social media influencing customer retention as they have an impact on variables such as loyalty and customer equity, but they do not examine the effects of social media on customer retention. In contrast, Nitzan and Libai (2011) accomplish pioneering empirical research into the effects of social networks on customer retention. Looking at this from a customer’s perspective and focussing on the role of social media in mitigating consumer defection, they conclude that social environment has a considerable impact on customer retention. However, they do not investigate the ways in which social media could improve customer retention.

Nevertheless, the relationship outcomes of social media activities remain disputed amongst practitioners and scholars (Hoffman and Fodor, 2010). Despite such studies, the extent to which social media can influence customer retention in the fashion industry remains unknown. The fashion sector in the UK has changed significantly over the past decade. In trying to maintain closeness to customers, companies tend to rush to adopt an online presence, viewing social networks, online communities, microblogging and video sharing sites as compulsory elements of their marketing strategies. As Kaplan and Haenlein (2010) note, “the higher the social presence, the larger the social influence” on people’s behaviour (p.61). Moreover, in this regard, Baird and Parasnis (2011a) state that “nearly 70 per cent of executives say their companies will be perceived as ‘out of touch’ if they don’t engage, and over half believe their competition is successfully reaching customers through social media” (p.32).

With such increased use of social media amongst fashion retailers, an analysis of the effects of social media on retaining existing customers has become essential. This study, therefore, addresses this requirement by investigating the ways in which social media can improve customer retention. The paper thus attends to fill a gap in the literature.

## THEORETICAL FRAMEWORKS AND FOUNDATIONS

It has been argued that the term social media can be used interchangeably with the term Web 2.0 (Constantinides and Fountain, 2008; Evans, 2010). Conversely, Kaplan and Haenlein (2010) argue that social media differs from the Web 2.0 concept. Based on such research, it can be concluded that both concepts are closely related. Hence, the relationship between social media and Web 2.0 is discussed first. The term Web 2.0 was introduced by O’Reilly (2005) to highlight a change in the way individuals contribute to the content of web pages. Constantinides and Fountain (2008) use the term Web 2.0 as an umbrella term for web applications, stating that Web 2.0 is associated with online applications and social media, with the social aspects of its applications. Constantinides and Fountain (2008) define Web 2.0 as:

*“a collection of open-source, interactive and user-controlled online applications expanding the experience, knowledge and market power of the users as participants in business and social processes. Web 2.0 applications support the creation of informal users’ networks facilitating the flow of ideas and knowledge by allowing the efficient generation, dissemination, sharing and editing/refining of informational content”.* (p.232)

Similarly, Chaffey and Ellis-Chadwick (2012) claim that Web 2.0 facilitates user interactions and encourages community and social network participation. From a buyer-seller perspective, Web 2.0 offers brands

the opportunity to listen and respond to their customers, to collect in-depth information about user preferences, and to permit “micro-targeting and addressable, customised messaging” (Fournier and Avery, 2011, p.2). Thus, companies have the power to build on relationship marketing.

Despite increased interest there is no unified definition of social media. However, the definition given by Kaplan and Haenlein is the most widespread in academic literature. According to Kaplan and Haenlein (2010) social media is “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content” (p.61).

Blackshaw and Nazzaro (2004, cited in Mangold and Faulds, 2009, p.358) describe social media as a “variety of new sources of online information that are created, initiated, circulated and used by consumers intent on educating each other about products, brands, services, personalities and issues” (p.2). This definition is supported by Mangold and Faulds (2009) who also consider social media as a hybrid element of the promotional mix. These authors also support the idea that customers are more likely to trust consumer-generated reviews in social media channels than corporate-sponsored communications. This opinion is also supported by Constantinides and Fountain (2008), who conceptualise social media as a reservoir of information and knowledge, providing users with unlimited choices that are just a click away.

However, there is some disagreement as to what social media encompasses. A variety of opinions exists because there are no precise boundaries between the categories (van Dijck, 2013). For instance, van Dijck (Ibid) identifies four types of social media: as social networking sites, sites for “user-generated” content, trading and marketing sites, and play and game sites, whereas Kaplan and Haenlein (2010) distinguish six types: as social networking sites, content communities, blogs, collaborative projects, virtual social worlds, and virtual game worlds. In contrast, Constantinides and Fountain’s (2008) classification includes blogs, social network sites, communities, forums/bulletin boards, and content aggregators. Kietzmann *et al.* (2011) identify content sharing sites, blogs, social networking, and wikis, while Mangold and Faulds (2009) consider a wide range of online, word-of-mouth forums, rankings websites, discussion boards, blogs, and social networking websites to be forms of social media. Notwithstanding the differences, all these studies indicate that social network sites and blogs have become an integral part of present-day life.

Thus, some authors place emphasis on social networking sites as the most prominent form of social media (Boyd and Ellison, 2007; Jahn and Kunz, 2012; Khan and Khan, 2012). For instance, Boyd and Ellison (2007) define social networking sites as web-based services that enable people to create a public or semi-public profile within a circumscribed system, and to connect with other users they know. Khan and Khan (2012) suggest that traditional media have lost their effectiveness and brands must harness social networking in order to reach customers.

In addition, interest in social media as a tool for branding and co-operating has increased significantly. Fournier and Avery (2011) note that social media facilitates open-source branding as it enables customers to create and share personalised experiences with like-minded individuals. Hall (2011) describes social media as a platform for collaborative working, whereby organisations and end-users create content together. Brogan’s (2010) research resonates with this assertion as the author considers social media to be a “new set of communication and collaboration tools that enable many types of interactions that were previously not available to the common person” (p.11).

Apart from that, Brogan (2010) does not perceive of social media as something that can still be considered ‘new’ as social media tools are everywhere in the marketplace. However, Fournier and Avery (2011) add that even brands have the opportunity of being everywhere in the social media, they are still ignored. Despite this reflection, organisations seem to embrace the social media concept and are anxious to integrate various forms of social media into their marketing strategies.

## **SOCIAL MEDIA AND BRAND COMMUNITY**

The last decade has witnessed the growth and increasing popularity of online communities, concentrating specifically on communication and social bonding between individuals (Brown *et al.*, 2007).

Given the opportunity to improve customer relationships by engaging and collaborating with consumers, marketers are becoming more and more interested in exploring, creating, and utilising virtual communities (Bagozzi and Dholakia, 2002; Dhalakia *et al.*, 2004). In fact, an early definition of a virtual community is given by Rheingold (1993), who states it is "...a social aggregation of people carrying out public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (p.146). Dhalakia *et al.* (2004) conceptualise virtual communities as different-sized groups of consumers who interact online in order to achieve the personal and shared goals of their participants.

In conjunction with this, some researchers have shed light on the essence of brand communities. Brown *et al.* (2007) define brand communities as networks where users with an interest in a particular product interact with other like-minded individuals to seek information and to contribute to consumer feedback. Muniz and O'Guinn (2001) describe such communities as a specialised non geographically-confined group of people sharing admiration for a brand. Similarly, McAlexander *et al.* (2002) describe a brand community as "...a fabric of relationships in which the customer is situated" (p.38).

In contrast, Martins and Patricio (2013) introduce the term 'Company Social Networks' (CSNs), which is distinct from the terms 'Online Communities' (OCs) and 'Brand Communities' (BCs). They suggest that most members of CSNs are in a pragmatic relationship with the brand and that the ties between participants are weak, whereas members in OCs and BCs are enthusiastic about brands and maintain relatively strong ties among peers. However, the researcher points out that no matter what the term may be ('online', 'virtual', 'computer-mediated', 'brand' or 'company social networks' communities) all concepts are closely related. This study predominantly uses the term 'brand community' but encompasses a review of all of the terms discussed above. Yet emphasis is placed on brand-customer relationships in order to achieve the purpose of this research.

Brand communities, as a considerable part of online communities, have drawn attention from numerous scholars and practitioners who have examined them within marketing contexts. Recent studies on brand communities have focussed on the influence they wield on customer behaviour. For instance, some researchers have explored how users seek information for products or services (Park and Cho, 2012), while others argue that communities have an impact on brand image (Brown *et al.*, 2007), brand equity (Muniz and O'Guinn, 2001), and brand loyalty (Hur *et al.*, 2011; Kozinets *et al.*, 1999; McAlexander *et al.*, 2002).

Other studies in this domain have focussed on EWOM communication given its growth and extraordinary popularity, as an integral part of online communities. Described as "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet" (Hennig-Thurau *et al.*, 2004, p.39) this phenomenon appears to have significant impact on consumer behaviour. Prior investigations have examined the impact of EWOM communication on customer decision-making and attitude formation (Brown *et al.*, 2007) and product sales (Chevalier and Mayzlin, 2006). In contrast, a study by Hennig-Thurau *et al.* (2004) investigates the motivations behind participation in EWOM. It concludes that the main customer motivations include a desire for social interactions and economic incentives, the opportunity to increase self-worth and concern for others. Nonetheless, what all these studies have in common is that they consider WOM as a more trustworthy source of information in relation to brands, products and services than company-generated messages.

As a whole, EWOM is a major part of online consumer interactions, with a strong influence on consumer behaviour (Brown *et al.*, 2007), driving a return on investment (Chu and Kim, 2011). Bearing this in mind, organisations incorporate EWOM communications in their strategies, though negative comments sometimes appear. Fournier and Lee (2009) advise companies to embrace conflict instead of avoiding it because such conflict causes communities to thrive. More importantly, given the global popularity of social media, enterprises are increasingly focusing on creating and managing brand communities in social networking sites such as Facebook, Twitter and MySpace (Gummerus *et al.*, 2012; Hur *et al.*, 2011; McAlexander *et al.*, 2002; Park and Cho, 2012; Royo-Vela and Casamassima, 2011). Notably, social networks are seen as one of the most favoured online communities for brand engagement. Engaging customers in brand community participation is crucial for companies in order to better understand the individual and social needs of their customers (Fournier and Lee, 2009; Hagel and Armstrong, 1997; Kim and Jin, 2006).

In essence, engagement with customers rewards brands with numerous positive outcomes. For example, Gummerus *et al.* (2012) identifies satisfaction, trust, commitment and loyalty as such positive outcomes, whereas Royo-Vela and Casamassima (2011) and Hur *et al.* (2011) have noted WOM behaviour and repurchase intention, positive WOM, cross-selling, and constructive complaints to be the results from customer engagement. It is also suggested that brand communities provide an opportunity to increase marketing efficiency and attract new customers (Fournier and Lee, 2009; Kim and Jin, 2006).

Additionally, one of the most discussed topics among social network communities is fashion and apparel shopping. Drawing on previous work, it can be argued that communities affect the fashion industry (Kim and Jin, 2006; Park and Cho, 2012; Royo-Vela and Casamassima, 2011; Thomas *et al.*, 2007), which enables retailers to enter into dialogue with members and gather feedback from individuals (Park and Cho, 2012; Thomas *et al.*, 2007). Being close to customers has become a crucial part of all business management as consumers dictate fashion trends (Thomas *et al.*, 2007). Thomas *et al.* (2007) summarise the most discussed categories amongst members; specifically personal style, brand and designers, tips and advice, and retailers. In contrast, Park and Cho (2012) conducted research that reveals a positive relationship between psychological attachment, commitment and information-seeking behaviour in social network online communities, which influences decision-making amongst apparel consumers. Yet despite the significance of brand communities, only a limited number of communities hosted by apparel retailers have been found (Park and Cho, 2012).

## **SOCIAL MEDIA AND CUSTOMER EXPERIENCE**

Customer experience has attracted the attention of scholars and professionals over the last three decades. However, there remains little clarity about the meaning of this term (Stone, 2011). Some scholars broaden the customer experience concept by taking into consideration all contacts a client has with a brand (Brakus *et al.*, 2009; Grewal *et al.*, 2009; Meyer and Schwager, 2007; Stone, 2011; Verhoef *et al.*, 2009). For instance, Verhoef *et al.* (2009) describe the customer experience as the total experience derived from all stages; specifically the search for information, purchase, consumption and the after-sales phase. Stone (2011) supports the same definition, adding that the experience could be gathered through multiple retail channels. In other words, experience is created by things such as retail atmosphere, assortment and price, which are under the control of organisations. It can also refer to things that companies have no power over, such as the purpose of shopping and the influence of others (Stone, 2011; Verhoef *et al.*, 2009).

According to Grewal *et al.* (2009) the customer experience includes “every point of contact at which the customer interacts with the business, product, or service” (p.1). Meyer and Schwager (2007) define customer experience as “the internal and subjective response customers have to any direct or indirect contact with a company” and explain that customer experience comprises every aspect of a company’s offering including the quality of customer care, packaging, advertising, ease of use, and reliability (p.118). Similarly, Brakus *et al.* (2009) describe brand experience as a set of subjective, behavioural and internal consumer reactions including feelings, sensations, and cognitions elicited by brand-related stimuli such as design and identity, packaging, communications, and environments. They further suggest that brand experience arises when individuals search for, purchase and consume brands.

In contrast, a study conducted by Palmer (2010) calls into question the conceptual validity of customer experience, suggesting that it would be consultants’ hype. Further, he defines experience as a verb (a process of learning) and as a noun (the gathering of knowledge, emotions and sensations) asserting that integrating the customer experience framework and customer relationship management allows limitations related to the latter to be overcome.

Bagdare and Jain (2013) place emphasis on the retail customer experience in their study. They conceptualise the retail customer experience across four dimensions: of joy, mood, leisure and distinctiveness. Enjoyment is an integral part of the shopping journey which leads to a positive mood. Leisure is associated with relaxation and relief from a busy and stressful life, and joy in shopping. Distinctiveness is constituted by three measurement items: ‘uniqueness’, ‘memorable’ and ‘wonderful’. It is a necessity in terms of attracting and retaining customers in a competitive marketplace.

Arguably, the customer experience concept is well developed in offline contexts, but it has not been explored in depth in online contexts (Rose *et al.*, 2011; Novak, Hoffman and Yung, 2000). Given the proliferation of Internet and online shopping, the customer experience has become even more important (Novak, Hoffman and Yung, 2000; Stone, 2011). Additionally, the creation of a superior customer experience seems to have become one of the central objectives in today's fast-paced environment. Nevertheless, findings regarding the factors that make the online customer experience compelling are scarce (Ailawadi *et al.*, 2009; Novak, Hoffman and Yung, 2000). More importantly, there are huge misunderstandings between organisational standpoints and user expectations in terms of a 'great experience'. A survey conducted by IBM reveals that 80% of companies believe they have been providing a superior experience, whereas only 8% of consumers considered they had such an experience (Meyer and Schwager, 2007).

The extent to which companies can enhance the customer experience utilising social media merits exploration. It is logical that using social media as a tool for managing customer experience has become a 'must' in today's competitive marketplace. Rose *et al.* (2012) claim that social media features foster retailer-consumer interactions. Besides, the online medium enables one-to-one communication and customised offers that target individual customers (Ailawadi *et al.*, 2009; Peppers and Rogers, 2011). Drawing on previous research, it could be concluded that the primary attributes of social media channels that make an experience positive are: interaction; information; communication; entertainment, including games and competitions; economic benefits, comprising discounts, coupons, promotions; and customer service (Ailawadi *et al.*, 2009; Dholakia *et al.*, 2004; Gummerus *et al.*, 2012; Kelly, 2013; Rose *et al.*, 2012). In general, to be successful, the experience must be unique, memorable and sustainable over time in the customer's mind (Bagdare and Jain, 2013; Palmer, 2010; Pine and Gilmore, 1998).

Notably, the purpose of a customer experience is to transform a user from being a satisfied customer, into a loyal customer, and then into an advocate (Metz, 2012). In this regard, a few examples of the way clothing retailers understand and adopt the customer experience concept are presented below. For instance, ASOS uses various social media channels to interact with its customers and thus improves the customer experience (Vizard, 2014). Through Facebook, Google+, and Pinterest, the firm provides fashion updates as it posts two or three different visual updates on each social networking site every day, promoting new ranges or sales products (Moth, 2013a). As a result, the brand gains a few hundred likes and comments. In addition, the company provides customer care and responds to @mentions through Twitter. Besides, it embeds Vine, the new Twitter application, encouraging customers to post clips of themselves unpacking a clothes order with a new hashtag (Moth, 2013a).

In comparison with ASOS, H&M fails to interact with customers through certain channels. For example, it uses Facebook mainly to promote its products. Besides, the brand responds to barely 5 to 10 @mentions per day and does not provide such dedicated customer service as ASOS on Twitter. With regard to Google+, H&M just duplicates its Facebook content. However, the company has launched various competitions related to posting pictures on Tumblr and Instagram in order to improve the experience that customers have with the brand. Also, it rewards customers with the opportunity to watch the Paris fashion show via live stream through Facebook and to speak to David Beckham via a Q&A Twitter campaign (Moth, 2013b).

Notably, with growing competition in the apparel industry, the customer experience has become an increasingly important concept as it stands for differentiation and gaining competitive advantage (Karakaya and Barnes, 2010; Novak, Hoffman and Yung, 2000). The customer experience is a key factor for creating value for consumers and initiating WOM communication (Bagdare and Jain, 2013) as well as for building long-term relationships (Rose *et al.*, 2011) and satisfaction and loyalty (Brakus *et al.*, 2009; Verhoef *et al.*, 2009). In addition, it influences brand image, retail sales and profitability (Grewal *et al.*, 2009; Verhoef *et al.*, 2009). It can be concluded that providing an impressive, seamless and interactive experience is now a prerequisite not only for retention but for survival as well.

## **SOCIAL MEDIA AND CUSTOMER RETENTION**

The last two decades have witnessed considerable attention to customer retention, and its antecedents and consequences (Nitzan and Libai, 2011; Verhoef, 2003). Due to the proliferation of Internet and Web 2.0

technology, and the shift in market power from vendors to customers, many retailers have moved their focus from products to customers (Peppers and Rogers, 2011; Sheth *et al.*, 2000), and have changed from transactional to relationship marketing strategy (Egan, 2011; Godson, 2009; Gummeson, 2008; Christopher, Payne and Ballantyne, 2002) in order to respond to shifts occurring in the marketplace, and thus to maintain competitiveness and profitability.

Customer retention is seen as a primary objective throughout enterprises that have adopted relationship marketing (Gronroos, 1991; Lemon *et al.*, 2002; Payne, 1994) but there is still little information about how to define and measure this (Ang and Buttle, 2006; Aspinall *et al.*, 2001). Harris (2010) describes customer retention as “the continuous attempt to satisfy and keep current customers actively involved in conducting business” (p.139). To achieve this goal, the customer’s needs must be met on an ongoing basis and new needs have to be investigated. Similarly, Godson (2009) asserts that customer retention means keeping all or most customers over a long number of purchase cycles. In contrast with these authors who suggest this precept, others claim that companies should focus on retaining profitable customers, rather than all customers (Buttle, 2004; Weinstein, 2002). For the purposes of this research, the current study is based on the assumption that through retention strategy the company aims to keep as many as possible of its existing customers.

Some studies have discussed the importance of retention and its benefits to businesses (Buttle, 2009; Godson, 2009; Harris, 2010; Payne, 1994; Rosenberg and Czepiel, 1992). Egan (2011) argues that acquisition and retention strategies have to work in tandem, even though retention is given more prominence in theory, as existing customers are less expensive. “It takes on average, 5 times as much time, money and effort to gain a new customer as it does to retain an existing one” (Peters, 1988, cited in Godson, 2009, p.72). Moreover, existing customers are more forgiving and more profitable. They add value, enter into collaborations, and give referrals (Egan, 2011; Godson, 2009; Payne, 1994; Rosenberg and Czepiel, 1992). Nonetheless, many companies still focus more on acquisition rather than retention in practice (Buttle, 2009; Godson, 2009; Harris, 2010; Payne, 1994; Rosenberg and Czepiel, 1992; Weinstein, 2002).

Some reasons for this may include: 1) the absence of measurable indicators (Ang and Buttle, 2006; Aspinall *et al.*, 2001), or 2) differences in the duration of a consumer re-purchase cycle in any given industry (Buttle, 2009), which make the measurement of retention and the assessment of the implemented strategy’s impact on the firm’s bottom line harder. Thus, despite the attempts of scholars and practitioners to shed light on retention, little remains known about it. There is, in reality, limited research not only on customer retention in general, but also on the impact of social media on customer retention (Ang and Buttle, 2006; Nitzan and Libai, 2011).

Previous studies have paid considerable attention to the role and effectiveness of retention strategies (Dowling and Uncles, 1997; O’Brien and Jones, 1995; Verhoef, 2003). What these studies have in common is that they consider loyalty programmes which provide economic incentives as a tool for retention. Clearly, the research in this domain reveals that loyalty and retention are highly connected. According to Johnson and Gustafsson (2000, cited in Szwarc, 2005, p.11) “loyalty is about customers’ intention or predisposition to buy, but retention is the actual act of buying again”. Others consider loyalty to be one of the main antecedents of customer retention (Liang *et al.*, 2008; Wirtz and Lihotzky, 2003). Given these assumptions, accompanied by the scarcity of information on retention, this researcher reviews loyalty parallel with retention, based on the presumption that loyalty leads to customer retention.

However, more recently it has been observed that due to changes in consumer attitudes, loyalty schemes alone are not sufficient stimuli any more (Deloitte, 2011). Therefore, the motivations that make customers loyal and thus improve customer retention merit exploration. Deloitte (2011) asserts that fashion retailers could improve retention by developing customer engagement analytics that aim to gain an in-depth understanding of the key drivers of retention behaviour and tailor their actions in this direction. Similarly, Hoffman and Fodor (2010) suggest that companies should assess social media effectiveness by measuring customer investment in a social media relationship instead of by calculating ROI. Customer investments such as brand engagement, information search, brand community participation and content generation are those behaviours that enterprises have to stimulate and take into account in order to increase the likelihood of long-term results, not only short-term payoff (Hoffman and Fodor, 2010; Gummerus *et al.*, 2012; McAlexander *et al.*, 2002).

Pioneering empirical research into the effects of social networks on customer retention conducted by Nitzan and Libai (2011) demonstrates that social networks have considerable impact on customer retention. In exploring the factors that lead to defection, they observe that highly-connected customers are more affected, whereas loyal customers are less affected by defections occurring in their circle of neighbours on social networks. Clearly, this study notes customer loyalty influence retention and its contribution to the bottom line, but it does not identify any of the determinants that develop loyalty in a social media environment.

Based on the perception that building and maintaining lasting relationships with customers is one of the main drivers of organisations that follow relationship marketing (Berry, 1983; Buttle, 1996; Christopher *et al.*, 1991; Gummesson, 2008; Godson, 2009; Morgan and Hunt, 1994) combined with the assumption that the ultimate objective of relationship marketing is customer retention (Gronroos, 1991; Lemon *et al.*, 2002; Payne, 1994), the current study further reviews and analyses research carried out on the effects of social media in fostering long-term customer-vendor relationships in order to examine the factors that lead to loyalty and retention.

A study by Liang *et al.* (2008) demonstrates the positive influence of relationship marketing on online customer perceptions, their loyalty, and ultimately, their actual purchase behaviour. The results reveal that social bonding (the most valued by customers), followed by structural bonding and financial bonding enhance loyalty, which is crucial to customer retention improvement. They further explain that as the first two bonding tactics involve providing information and interaction to solve customers' problems and meet their needs, they have a stronger impact than price incentives on intentions to engage with brands online.

With this in mind, it is not surprising that social media has attracted a lot of attention from practitioners and scholars in terms of building seller-buyer relationships over the past years. The way companies manage customer relationships has changed radically with the emergence of social networking sites (Martins and Patricio, 2013). With social media, the emphasis is on creating a dialogue with customers, in which useful information is exchanged so both parties achieve benefits from the relationship, rather than delivering a message as traditional marketing does (Gillin, 2007). Gillin (2007) adds that with this new means of interaction, customers are seen as co-creators and long-term partners, which builds trust, develops customer loyalty and leads to more lasting relationships. Similarly, other researchers consider that social media provides an opportunity for businesses to engage customers in two-way communication and thus foster customer relationships (Hennig-Thurau *et al.*, 2010; Jahn and Kunz, 2012; Laroche *et al.*, 2013).

Laroche *et al.* (2013) reveal that brand communities established on social media positively influence customer/product, customer/brand, customer/company, and customer/other customers relationships, which in turn positively influence brand trust. This trust has a positive impact on brand loyalty. Thus, the study shows that trust is one of the main antecedents of loyalty, which coincides with the general attitude expressed in loyalty and trust literature (Chaudhuri and Holbrook, 2001; Harris and Goode, 2004; Hong and Cho, 2011). Moreover, the major role of trust is also identified in other studies in the relationship marketing domain. For instance, Morgan and Hunt (1994) and Too *et al.* (2001) have explored the role and effect of trust and commitment on building successful relationships revealing that high levels of trust lead to relationship commitment and to increased co-operation and in turn a high level of commitment leads to a high level of loyalty. Wirtz and Lihotzky (2003) have examined various relevant strategies which suggest that trust building is one of the primary customer retention strategies. Hence, it can be argued that commitment is another key mediating variable of customer loyalty (Morgan and Hunt, 1994; Too *et al.*, 2001).

With regard to building loyalty, other researchers also note the importance of hosting brand communities in which brands can engage with customers and enhance their experience (McAlexander *et al.*, 2002; Muniz and O'Guinn, 2001; Schau *et al.*, 2009). There are many other benefits to cultivating brand communities and engaging consumers in participation. For instance, consumers participating in a community develop strong emotional bonds with the brand (Wirtz and Lihotzky, 2003) and this sense of belonging results in the increased likelihood of providing feedback and serving as 'brand missionaries'. This reduces the chance of switching brands (McAlexander *et al.*, 2002). Besides, these customers tend to be more forgiving in the case of product or service failure (Berry, 1995 cited in Muniz and O'Guinn, 2001). More importantly, brand communities generate WOM (Brown *et al.*, 2007; Cao *et al.*, 2009; Chevalier and Mayzlin, 2006; Kozinets *et al.*, 2010) and assist organisations in establishing and strengthening long-term relationships (Hur *et al.*, 2011).



More specifically, other studies on social media focus on customer engagement (Godson, 2011; Gummerus *et al.*, 2012; Hoffman and Fodor, 2010; Jahn and Kunz, 2012). They point out that the key driver of loyalty in the online environment is customer engagement. For instance, Godson (2011) states that engagement increases loyalty, and social media tools can help enterprises to engage with customers. According to Jahn and Kunz (2012), social media engagement is a successful strategy for maintaining relationships and retaining existing customers. Additionally, Macy and Thompson (2011) explain that engagement means entering a conversation in which customers and influencers are active and spend time. The aim of engagement is to establish the right message at a connection touch-point based on understanding what customers want by listening carefully and exploring what people are saying about the brand. They claim that interactions in real-time reinforce customer retention and brand loyalty as well as increase user-generated content, such as opinions and reviews and peer-to-peer recommendations. In this regard, Tuten and Solomon (2013) add that a higher level of brand engagement leads to a stronger brand-customer relationship. To achieve this, firms could offer brand assets like downloads and wallpapers that serve as a stimulus for co-creating brand content (sharing positive stories, product information, reviews and referrals). The importance of highly engaging social media activities is also highlighted by Hoffman and Fodor (2010). They assert that involving user-generated content in social media campaigns generates long-term commitment and enhances loyalty.

Some authors explore the significance of adding value in return for customer engagement (Gillin, 2007; Macy and Thompson, 2011; Tuten and Solomon, 2013). Such authors suggest that an effective social media strategy requires the company to reward fans for their emotional attachment to the brand by delivering value. It is pointed out that activities such as providing information about new product releases, company news, competitions and promotions, and useful and/or entertaining links and resources on brand pages add value for consumers (Macy and Thompson, 2011; Tuten and Solomon, 2013).

In the context of engagement, prior research has also identified: the power of real-time engagement (Garner, 2013; Macy and Thompson, 2011; Scott, 2012) and the role of brand emotions for creating connected, loyal customers (Shiv, 2010). As regards real-time interactions, these practitioners claim that engaging with customers in real-time is essential for satisfying consumers. In terms of value creation, Shiv (2010) claims that brand emotion is at the core of establishing sustainable customer value propositions (CVPs), which in turn increases the likelihood that the customer will remain connected to the brand. He further suggests that stimuli such as an attractive celebrity, humour, and music trigger emotions create brand association in the minds of consumers.

More importantly, in addition to strong customer-brand interactions, creating a positive experience is accepted as another key determinant that helps to build strong relationships (Wuyts, 2010). Drawing on previous research, social media attributes can positively influence the customer experience and they should be used in this direction, as positive customer experiences result in increased satisfaction, trust and loyalty (Brakus *et al.*, 2009; Verhoef *et al.*, 2009; Mascarenhas *et al.*, 2006; Rose *et al.*, 2012). Providing real-time customer service through social networks is seen as another challenge for organisations (Jahn and Kunz, 2012; van Bruggen *et al.*, 2010) as it plays a major role in enhancing the customer experience. According to Egan (2011) customer service is a crucial element for building and maintaining relationships. Providing excellent service enables an organisation to stand out from the crowd, enhance its image and reputation, increase customer satisfaction and retention, gain more advocates for the brand, and improve profitability (Cook, 2002). Furthermore, different surveys reveal that customers are more likely to stay loyal and to be attracted to good customer service and experiences rather than by loyalty schemes. For instance, Twitter is seen as a tool for providing customer service in real-time in a way that is far more effective than call-centres and online enquires (Gunton and Davis, 2012; Kelly, 2013; Peppers and Rogers, 2011). In addition, presenting a responsive service and demonstrating genuine concern for feedback and opinions are valuable organisational traits (Kelly, 2013). Joining conversations and being prepared to offer ideas and solutions (Macy and Thompson, 2011) can enrich the customer experience creating loyalty amongst existing customers. Notably, managing customer experiences contributes to increasing satisfaction, which should be one of the main goals of enterprises, as satisfaction is proven to be a key determinant of customer retention (Hennig-Thurau and Klee, 1997; Lemon *et al.*, 2002; Nitzan and Libai, 2011; Oliver, 1997).

## **MANAGERIAL IMPLICATIONS AND CONCLUSION**

Some authors argue that social media can be used as a customer relationship management (CRM) system (Baird and Parasnis, 2011b; Weber, 2010). Social media platforms can operate various functions together, comprising marketing, customer support and sales all in one (Baird and Parasnis, 2011b). This approach facilitates the management of information derived from different touch points and allows customers to be treated holistically. In contrast, Weber (2010) claims that the social media have become a key CRM system that helps organisations gain access to consumer attitudes in real-time. Tuten and Solomon (2013) describe the significant role social media play in CRM. They provide several reasons why companies might turn to social media to conduct their social CRM. They suggest that social media platforms allow a quick, efficient way of communicating with large groups of customers and they allow micro-targeting and customising messages to be directed at individuals. Social media also facilitates the monitoring of trending topics and preventing problems and finally, social media offers firms a means to use the LARA framework (Listen to customers conversations; Analyse them; Relate this information to existing information within your organisation; Act upon those conversations) (Tuten and Solomon, 2013). Notably, the literature in this domain provides insights into the importance of social media on customer retention but also it reveals the lack of sufficient empirical research into the impact of social media on customer retention.

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# **THE MERGER OF LARGE ENTERPRISES, PROBLEMS OF INTEGRATION**

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## **ABSTRACT**

*Mergers and acquisitions cause a lot of problems. They are particularly significant for large enterprises. This is due to the fact that each business has its own well-established business processes, different types and kinds of information technologies. The article examines the experience of the company Daimler AG.*

**Keywords:** integration, merge of large enterprises, ERP-system

## **INTRODUCTION**

Mergers and acquisitions is a very common occurrence. However, during the implementation of such projects there are a great number of problems, including the problem of integration. In the late 1990's, the German company Daimler AG acquired the U.S. Company "Chrysler", and it has become one of the largest industrial merger in history. Daimler AG currently has manufacturing facilities in 37 countries and sells its products in 200 countries.

## **DAIMLER'S AG EXPERIENCE IN MERGERS AND ACQUISITIONS**

Daimler AG is one of the world's most successful automotive companies. With its divisions Mercedes-Benz Cars, Daimler Trucks, Mercedes-Benz Vans, Daimler Buses and Daimler Financial Services, the Daimler Group is one of the biggest producers of premium cars and the world's biggest manufacturer of commercial vehicles with a global reach. Daimler Financial Services provides financing, leasing, fleet management, insurance and innovative mobility services

The company's strategy is based on four pillars - the geographical coverage, a wide range of products, technology and brand development. To implement it, the company aims are:

- be represented in all major regions of the world;
- company range - from heavy-duty trucks for commercial container to smaller models such as "Smart";
- continuous investment in latest technology allows the company to be a world leader automotive;
- investing in the individual brands to maintain market leadership, the company seeks to avoid duplication.

Daimler's and Chrysler's merger was one of the largest deals in history. So the integration processes managing caused great difficulties. One of the main problems in the integration process after the merger was to improve the profitability of the company, especially it's American part - Chrysler. Currently, the combined company is working steadily and is ready for further expansion. These willingness expressed in investing in the Pacific region through the company Hyundai and Mitsubishi in particular.

One of the most important strategic goals of Daimler AG is to increase shareholder value. Therefore, the company continues investment in an integrated value chain. It has been actively investing in the brand Mercedes Benz, personnel, technology, communications with customers and suppliers. The company tried to maintain a balance between investment in physical infrastructure, production and intangible assets. For example, to submit the car "Smart" in the market, it took about four years. It is much less than usual for the automotive industry. However, a new brand development takes time and is very expensive. Investing in brands and technologies, making necessary further investments in production infrastructure. As an approach of Daimler AG integration and standardization, the practice shows that what is good for one company, not always suitable for another. Each of the company's predecessors believed that its business model is correct, and of course, after the merger revealed significant differences between them. Hence the problem of an interconnected system of both companies. The solution began with the standardization of processes, which contributed to the unification and allowed to retain control over the business.

The merged company inherited a set of heterogeneous systems, and after the merger was to complement existing ERP-systems in other resources. Daimler AG is actively using information technologies and achieved notable successes in the use of e-Procurement. Regarding to the integration of electronic procurement systems, it would be a mistake to try to implement standardization in a short time. However, the company has made significant progress in integrating its own business-processes with the business-processes of suppliers.

Changes are a continuous evolutionary process, which requires some investment. For example, currently in the process of integration includes not only first-tier suppliers, but the entire supply chain until the fourth or even fifth level. Skepticism about the potential benefits of industry marketplaces such as Covisint, does not interfere with them, because otherwise you may lose a competitive advantage. The company believes that the area still have a supply of savings, but also believe that a much larger effect can be achieved by further integration of our sales channels to end users through the distribution network.

Integration of physical processes in the supply chain - from procurement to sales - significantly increased the efficiency of the company. However, special attention is paid to two other areas of improvement: working capital and financial chain. Among the main objectives was listed reducing working capital and optimize cash management processes. The financial service must delve into the production process and understand the factors that determine the size of working capital. So, the company aims is more closely integrate the financial departments within the company.

Decrease of working capital is a very simple matter. It should not harm the relationship with customers and suppliers. Therefore, the company must work closely with suppliers in the area of technology development and reduce production costs while maintaining high standards of functionality and quality components.

In the years 2000-2003 the company had successfully implemented a system of accounting and costing-based ERP solution from SAP. This system allowed to submit financial information by segment of business, by region and legal entities. Reporting deadlines have also been substantially reduced. Reducing the time did not affect the quality of the process of closing the accounts, on the contrary, it increased. Transaction processing has become less expensive and much easier.

There are two serious problems in Daimler AG financial service. The first one is: it will continue the program of standardization of processes, focusing on those areas where it is possible the introduction of global standards. For example, the company implemented the concept of factory management information will help improve transparency and analytical support. It will also help to reduce working capital. The second objective is improving risk management processes. Risk management is not just a technical problem of financial services. It refers to the enterprise as a whole: its culture, behavior, and how the company will change over time.

Since the mid-1990's, companies such as Daimler AG, ExxonMobil, and Colgate-Palmolive, have made a total commitment to the integration of (both by business and geographical) in corporate worship, and have a great benefit. The basic prerequisite for success is a sound strategy, focused on optimizing processes and reducing costs. This strategy, coupled with the discipline of its execution has already produced tangible results in the most important sectors - the centralization of data flows, restructuring of business processes, reduce

inventory, timely delivery, customer service and cash flows. For example, when a full program of global integration in the Colgate-Palmolive total expected savings should exceed \$ 600 million.

While enterprise resource planning (ERP-systems) have been used back in the 1990's and enthusiasm were seen in many industries, very few people managed to come close to what Daimler AG has almost reached - a fully integrated ERP-complex, covering all business on a global scale. Only a few companies that share the views and aspirations of Daimler AG, have achieved significant benefits in the following areas:

- search and collection of information about customers, suppliers and business partners;
- delivery of more accurate data and better information to key contact points;
- strengthening relationships with customers, improve service quality and customer satisfaction;
- significant savings on all key functional groups.

The fundamental advantage that allows the introduction of ERP-systems - is the ability to manage business processes and information flows in a single integrated environment that improves coordination, increases transparency, efficiency and responsiveness to the action. In such systems classically implemented a network effect, where the cost increases with the number of participating functional groups and users as well as a connection of dissimilar parts. The more processes will be integrated, the more benefit can be obtained.

Many companies are eliminating barriers, standardize, refuse non-core businesses, connect, and are out to cut costs. However, although no one denies that the integration is to simplify processes and reduce costs, to achieve this in reality is not so easy.

With increasing complexity of systems integration process is slowed down, and in some cases even stalled. This is facilitated by globalization, industry consolidation and specialization. Now we will focus on large-scale mergers and acquisitions department of non-core businesses, the wave of outsourcing and the increasing need for communication, both internal and external.

If complexity is not transformed into a constraint, there are often changes in dam - the company set the best, but is often incompatible ERP-system, to impose e-Business solutions isolated functional groups, rather than embed them seamlessly into the existing infrastructure.

Over the past decade, the ERP-system of the first generation have spread widely and have been a significant evolutionary path. Significant cost reduction and simplification of processes, which have advanced the company would have been impossible without the use of these powerful tools. While companies are trying to cope with the increasing complexity of systems and continuously growing demand for information technology, there are a number of questions that need answering. Among them are:

- How to achieve the flexibility to change the business model, but to maintain its integrity?
- How to deal with the "spaghetti system" in the company and to achieve genuine integration?
- How to change the ERP-system without sacrificing manageability of your IT environment?
- How reduce costs and improve service by smaller forces?
- How to fully exploit the potential integration of new technologies?

Once separated companies now collaborate and communicate with each other much more freely than ever before, sharing important information and common processes. To bring cooperation to a new, higher level, dynamic environment of modern business needs a fundamentally new technology platform, built on a less bulky, less expensive, independent, yet fully-integrated applications.

Now CFOs make the transition from the legacy of disparate systems to integrated ERP-platform, the ERP-groups, to an integrated but open environment. The new system should provide not only integration, but also flexibility. We are moving not just to the ERP-systems or networks connected to each other and to the larger ERP-business model, in which traditional organizational boundaries are permeable, and, eventually, disappear altogether.

Here we consider the changing technological environment finance director, new approaches to ensure a balance between centralization and decentralization, as well as the benefits of modern ERP-systems. The new concept of integrated environment called Beyond ERP.

## **INTEGRATION WITH THE TERMS OF CFO**

Most companies constantly have to find a compromise between the desire CEO to seek new business opportunities that require non-standard approach and the flexibility and the desire to finance director for security, stability, structure and discipline. CIO seeks to maximize the benefits of new technologies, and therefore interested in ensuring standardization and control.

In some of the most ambitious and successful reengineering programs undertaken to date, ERP-platform was used as the infrastructure that supports the transformation of rigid organizations with a clear division into departments in a process-oriented structure. The conversion is carried out global leaders such as IBM, Kodak and Chevron

Many corporations could receive additional benefits, adding to the existing ERP-system new features and modules. As an example, planning and optimization of supply chains in the Colgate-Palmolive and Procter & Gamble, Procurement e-Procurement at Lockheed Martin, and Quaker Oats, Nestle corporate portals and BOC and product lifecycle management in the Aventis and Bayer.

According to some reports, for companies that have successfully implemented ERP-system, characterized by the same strategic approach: they use the ERP-system as a framework for enterprise information systems. They are usually stable and mature team of top managers with a clear vision of the goals of corporate information resources. These commands also take responsibility for managing the ongoing processes of transformation in their organizations

Let us clarify what is integration means. In the context of business applications, this term is often used incorrectly, leading to incorrect evaluation of situations and misunderstandings. When it comes to information systems are usually referring to the integration of data and process integration (although the increasing use of "portals" provides a form of application integration at the user interface).

As a rule, by the data integrating we understand the general model of a view or a common data format that can be recognized and understood by different applications. For example, "product" in the CRM-system (customer relations) has the same size and attributes as the "product" of the production system.

The standard data formats such as XML (eXtensible Markup Language), can facilitate the exchange of basic information about the product between the CRM-system and production system and the exchange of documents on transactions (such as orders for the sale of a product). However, this so-called data integration system will not allow the host to understand what to do with the received order for sale without integration processes.

Modern ERP-systems are designed and arranged so as to provide and integrate data and process integration. All applications and components of the ERP-system and the continued use of a single model of data representation, so that the format and attributes of the 'product' in the same module, ERP, and the module CRM, and supply chain management module and the module e-Procurement.

In addition, the integration occurs at the process level, so, for example, sales order generated in the CRM-system automatically initiates a chain of actions: check credit in the accounts receivable module, checking stocks in the materials management module, the formation of a production order in the unit of planning, accrual of future income in the financial module.

## **THE MAIN ASPECTS OF INTEGRATION AND THE BENEFITS IT PROVIDES**

The integration involves the integration of data: consistent information about suppliers, products and customers for a "unique view of the situation"

The benefits of "full integration": a master record for each vendor, product or customer, available to all users, with different presentation elements based on user role

Transparency of information about business processes horizontally and vertically - the possibility of transition to other levels to get detailed information, until the original transaction and all related documents

Event-driven business process flows. Business processes and workflows are initiated depending on the status or value of the item of information

Many companies benefit from the simplification and standardization in the implementation of ERP-systems as a result of reducing the cost of operations, staffing levels, working capital, cost of deployment and maintenance of information technology, and increasing transparency. At the same time financial and CIOs alike have to adapt to the new harsh reality, as the determinants of corporate IT strategy, have changed dramatically in recent years.

ERP-system should adapt to the internal (structural) and external (market) changes.

Changes due to internal causes. Restructuring activities require significant configuration changes, and processes the data in ERP-systems. The integration process depends on the integration of data. Change management philosophy (for example the changing balance between centralization and decentralization) also affects the physical (implementation) and logical (customer orientation, or company setup and configuration), the characteristics of ERP-systems.

Changes due to external causes. External repositioning, mergers and acquisitions, separation of non-core business, industry restructuring, changes in legislation, technological innovations, new initiatives in e-business, such as direct contact with suppliers and customers via the Internet - all of this may require a transition to an entirely new business models.

Despite the emergence of opportunities for simplification and integration, most companies have to deal with dozens of systems from different vendors to coordinate their diverse functional goals and opportunities, to try to quickly adapt the system to the demands of the market and competitive conditions.

In the example below reviews the experience of a global company, which shows how to solve the current problems as it moves to a more focused model of integration. The situation was complicated by the company's recent major merger, in which she was the owner of two ERP-systems with completely different sets of features, advantages and limitations.

This led to the necessity of forming a new strategy for the integration after the mega-mergers

Prior to the merger considered a global chemical company has installed SAP software at all its plants in the U.S., Europe and Latin America. One ERP-system was used for the production and delivery of service, the other - for the operation of commercial and financial services. The elements of production and financial systems were interconnected and covered nearly 200 global business processes that are configured in a mySAP ERP system, and require substantial support from internal and external staff.

The company has received significant benefit from the synergies of the original and decided to go to the next level of integration using SAP solutions to support the work of other services. At the same time she continued to include in your IT environment at the best, but isolated solutions, which invariably led to the emergence of a "spaghetti system". CFO and CIO constantly have to solve a double problem - how to extend the functionality of the underlying software, while simplifying the structures, systems and processes. Time consuming problem of coordination of a centralized service management, regional and local support centers in individual countries.

When you merge the company with another of approximately the same size as integration environment has changed radically, and not for the better. As already mentioned, the first company adhered to the long-term,

phased implementation strategy of SAP acquired the company was engaged in consumer goods and the choice of the ERP-system was guided by a fundamentally different criteria. The software company was acquired in a relatively inexpensive but highly standardized. Thus, the problem was to combine centralized global ERP-system of one company with decentralized systems, on the other.

Differences emerged in the corporate cultures of the board of directors of the combined company. Representatives of the first companies insisted on the use of SAP solutions in manufacturing and first of all persuaded to continue the implementation of SAP in the priority areas. But the agreement did not last long. CIO of the combined company, which previously was responsible for the implementation of ERP-systems in the acquired company, in no hurry to move to a more complex solution. At the same time, the combined company's chief financial officer said: "It is time to achieve synergies at the level of the company, and at the level of financial services"

The new system requirements, due to merger: the need for synergy, reduce costs, maximize the use of the combined capacity - law (conformity of production standards and rules), information (portals), technology (e-Procurement), synergies in sales / customer relations (CRM) , changes in cross-functional needs, such as forecasting and reporting.

The central problem: the transition to an integrated solution in the form of new shared service centers. ERP-system of the first company to provide complete integration of processes and data, and the same was the case in the acquired company. In the new situation required an open integration, separation processes and data in both ERP-systems and a common solution to improve the impact ERP-investments of both companies.

Key challenges: interoperability model or data representation format during the transition from one system to another (perhaps, for many systems), the routing of data streams for transmission from one system to another (in batch or real-time), the introduction of an audit system that can monitor the success of the data and eliminate the differences that exist in the transmitting and receiving systems.

Each of these problems requires a clear and definite statement of the cost of maintenance. Most of the time in any organization that provides IT support to take up this problem of interaction between different systems. (You know how many IT professionals working at the weekend to eliminate failures in packet data?) Get on the location the user and imagine how much time should an employee in the marketing service to verify and reconcile product information, prices and forecasts of even the best, but different systems?

Programme of Action and Strategy CIO include:

- full integration and maximize synergy;
- benefits from investments in information technology;
- optimize the supply chain, commercial and financial processes;
- use the best e-Business solutions in the industry.

The problems of integration faced by the new company were difficult and resource intensive. Further implementation of SAP solutions in the production of required financial support multiple deployment modules. To combine both companies' systems, the CIO had to choose one of two options.

1. Make a production component of a fully autonomous, with its own financial performance, and use a very simple, but costly integration interface that provides data transfer from one system to another.

2. "Expand" systems and processes to achieve interoperability and data at a detailed level. This is an expensive and complex to support the decision, but in this case, all systems must operate more reliably.

Two complementary solutions has been produced as a result:

- establish a basis for middleware integration core with a reduced number of interfaces between the ERP-systems. Advantages: less complexity, easy maintenance, lower cost (though it concerns symptoms rather than causes). The main drawback: duplicate applications and data. The solution would require additional configuration and setup, additional maintenance and processing of additional financial information.

- create a single repository of standard data and "unleash" the processes in each of the ERP-systems. Advantages: a single data standard and high process flexibility. The decision would allow the company to adapt to future change in the ratio of decentralization and centralization in different parts of the world.

The company chose a strategy of integration, which is supposed to create a single repository of data and a standard kernel integration for isolated and changing processes. In some countries and regions, these processes are standardized, in others, where it prevented, in particular, features of local law, they brought in line with local conditions. Difficult situation, which was described above the company cannot be called unusual. Presented in the example problems and discrepancies in the views of managers familiar with any team participating in a merger or trying to adapt the ERP-system to new markets and competitive conditions. There is no total for all the right or wrong decision, because the situation in the companies are very different. However, the use of objective criteria may partially release the decision-making process of emotion

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Here are some guidelines for the financial director, in a similar situation

- try to streamline the system environment - standardization and globalization lead to ordering;
- make development initiatives from a variety of decentralized projects in a globally coordinated program - to manage the processing and standardization of data across the company from the corporate center;
- to manage large projects in the field should be selected centralized management;
- global business processes usage - use the IT standards, ensuring maximum benefit is impossible as long as business processes are not consistent.

## CONCLUSION

In the conclusion, we can say, that for maximum flexibility and more efficient of final integration it is necessary; firstly, install any universal information system, and secondly, provide a well-structured interface. To increase the effectiveness of technology investments, it is necessary have clearly describe architecture of business processes and systems and develop a specific and realistic integration project schedules and deadlines.

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# **CORPORATE FINANCIAL MANAGEMENT: GRAPHICAL ANALYSIS OF FINANCIAL LIQUIDITY – FROM COMPANY MANAGING TO MANAGE OF AN INTERCONNECTION WORD**

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## **ABSTRACT**

*One of the most important characteristics of the activities and status of the company is its liquidity. This article deals with evaluation of the company's liquidity and to identify the factors determining it.*

*Keywords:* corporate finance management, graphical financial analysis, enterprise financial Liquidity.

## **INTRODUCTION**

Creation of conditions of stability in the economy guarantees timely payments to contractors while ensuring a given level of return, all this are liquidity management issues. A lot of enterprises have imbalance of liquidity. The analysis insure that over half of enterprises can not provide industrial assets (fixed assets and inventory) by normal resources of foundation (owners' equity, long-term debt and quick-term credit); quarter of enterprises have fixed assets to current assets ratio more then 0.3; two-thirds of enterprises have current ratio (liquidity) less 2 and profit margin low then 20%.

This article continues the solving problems of a financial management balance of liquidity, in an enterprise.

## **RESEARCH APPROACH AND METHODOLOGY**

An understanding of key issues, themes, perspectives, and indicators was highlighted through the literature review. For a complete and comprehensive solution of the problems, for research process as a whole, the first step was the search and review of related literature.

Analyzing evidence were used data from the financial statements of public companies, mostly with the legal status of public corporations (about 250 companies). The research was organized in terms of both the quantitative and qualitative forms of analysis. Qualitative analysis was used to generalize the data in the analysis.

## **LITERATURE REVIEW**

The company financial statement can be described by the following characteristics [12. Zhilkina, 2014; 13. Zhilkina, 2005; 14. Zhilkina, 2008]: Finance stability; Liquidity; Probability of bankruptcy; Financial results and its structure, Structure and effectiveness of capital investment, Structure and efficiency of the assets.

There are six main particularly important things to keep in mind when examining a balance sheet and Income Statement: (1) level of finance stability, (2) level of liquidity, (3) probability of bankruptcy level, (4) return on sails, (5) return on sails, and (6) return on equity.

Level of finance stability.

The level of finance stability is rated in five categories (Formulas see on tabl.1):

- absolute finance stability;
- normal finance stability;
- permissible finance instability;
- impermissible finance instability;
- critical finance stability.

**Tabl.1: The levels of finance stability**

State	Formula
absolute finance stability	$FA + Inv \leq Eq$ , were: FA - fixed assets; Inv - inventory Eq - equity
normal finance stability	$FA + Inv \leq Eq + LTD$ , were: LTD – long-term debt
permissible finance instability	$\begin{cases} Eq + LTD < FA + Inv \leq Eq + LTD + STC \\ FA + Inv(s) \leq Eq + LTD \end{cases}$ were: STC - short-term credit, Inv(s) –part of inventory, that can be sale
impermissible finance instability	$\begin{cases} Eq + LTD < FA + Inv \leq Eq + LTD + STC \\ FA + Inv(s) > Eq + LTD \end{cases}$
critical finance stability	$FA + Inv > Eq + LTD + STC$

#### Level of liquidity

The level of liquidity is rated also in four categories (Formulas see on tabl.2):

- absolute liquidity,
- permissible liquidity,
- low liquidity,
- critical liquidity.

**Tabl.2: The levels of liquidity**

State	Formula
absolute liquidity	$DA \geq DD$ , were: DA - discount asserts (Cash + 0,5* Accounts receivable + 0,3* Inventory; DD - discount debts (Accounts payable + 0,5* Short-term debt + 0,3* Long-term debt)
permissible liquidity	$DA \geq 0,75 * DD$
low liquidity	$DA \geq 0,5 * DD$
critical liquidity	$DA < 0,5 * DD$

#### Probability of bankruptcy level

The level of bankruptcy probability is rated also in three categories (Formulas see on tabl.3):

- low probability of bankruptcy,
- middle probability of bankruptcy,
- high probability of bankruptcy.

**Tabl.3: The levels of bankruptcy probability**

State	Formula
low probability of bankruptcy	$MCA \geq CL$ ,

State	Formula
	were: MCA - material current assets (cash and inventory), CL - current liabilities
middle probability of bankruptcy	$MCA \geq 0,75 * CL$
high probability of bankruptcy	$MCA < 0,75 * CL$

#### Return on sales, return on assets, return on equity.

There are no normal levels of the indexes – return on sales, return on assets, return on equity (Formulas see on tabl.4). But everybody prefers the following situation:

$$ROS_{bp} > ROS_{ep},$$

$$ROA_{bp} > ROA_{ep},$$

$$ROE_{bp} > ROE_{ep},$$

were: bp – a beginning of the analyzing period;  
ep - an end of the analyzing period.

**Tabl.4: Return on sales, return on assets, return on equity**

Index	Formula
return on sales	$ROS = \text{Net income} / \text{Net sales}$
return on assets	$ROA = \text{Net income} / \text{Total assets}$
return on equity	$ROE = \text{Net income} / \text{Owners' equity}$

## FINDINGS

In this approach, liquidity will ensure a Solvency of the company.

Liquidity can be divided into four degrees (levels):

Liquidity also has four levels:

1) Absolute liquidity:

$$DA \geq DD,$$

where: DA - discount assets (Cash + 0,5\* Accounts receivable + 0,3\* inventory)

DD - discount debts (Accounts payable + 0,5\*Short-term debt + 0,3\*Long-term debt )

2) Admissible liquidity:

$$DA \geq 0,75 * DD$$

3) Low liquidity:

$$DA \geq 0,5 * DD$$

4) Critical liquidity:

$$DA < 0,5 * DD$$

How can they be assessed as having complete and accurate information about the liquidity of the company?

## GRAPHICAL METHOD LIQUIDITY ANALYSIS

Graphical method visualized presentation the actual financial condition, and also identifies areas for improvement. Consider the possible combination of assets and obligations of the company (pic. 1-4).

	DA		DO	
			75-100%	
			50-75 %	
			< 50%	
Cash + 0,5* Accounts receivable + 0,3* inventory				Accounts payable + 0,5* Short-term debt + 0,3* Long-term debt
Pic. 1. Absolute liquidity				

	DA		DO	
			75-100%	
			50-75 %	
			< 50%	
Cash + 0,5* Accounts receivable + 0,3* inventory				Accounts payable + 0,5* Short-term debt + 0,3* Long-term debt
Pic. 2. Admissible liquidity				

	DA		DO	
			75-100%	
			50-75 %	
			< 50%	
Cash + 0,5* Accounts receivable + 0,3* inventory				Accounts payable + 0,5* Short-term debt + 0,3* Long-term debt
Pic. 3. Low liquidity				

Cash + 0,5* Accounts receivable + 0,3* inventory	DA		DO	
			75-100%	
			50-75 %	
			< 50%	
				Accounts payable + 0,5* Short-term debt + 0,3* Long-term debt
Pic. 4. Critical liquidity				

So to improve the company's liquidity we need to balance discounted assets and discounted liabilities by increasing the first and decreasing the second.

## FINANCIAL MANAGEMENT USING

Comparison of graphics at the beginning and end of the analyzed period can not only assess the actual condition, but allow for a factor analysis. For this analysis is sufficient to compare the values of indicators factors. With the growth of asset situation is improving, with the growth of liabilities - is worsening. So, if we want to increase the liquidity we must growth assets - Cash, Accounts receivable, inventory and reduce the liabilities: accounts payable, short-term debt, long-term debt.

## CONCLUSION

Summarize the listed models it is possible to say that the financial analysis system, undoubtedly, is an important element of a control system at the enterprise and corporate financial management. Integration of data of the financial analysis into the general management system at the enterprise will allow to raise quality of a control system of the enterprise, and to create enterprise competitive advantages. Proper management of the company allows us to learn how to properly manage and our multipolar and interconnection world. It is one of the steps on ways from company managing to manage of an interconnection word.

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# INCORPORATING QUALITATIVE INDICATORS OF WELL – BEING INTO QUANTITATIVE ECONOMIC RESEARCH

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## ABSTRACT

*The paper discusses common approaches to quality of life and human well – being issues. It provides a literature overview of most recent concepts in this field. The idea of Bhutan’s Gross National Happiness Index has been opposed to the most popular measure of human life quality – the Gross Domestic Product. Moreover, it aims at attiring the attention of economists to the need for enlarging their quantitative research instrumentarium by qualitative indicators. Finally, the authors propose their own index, that incorporates both qualitative and quantitative drivers of well – being into one aggregated measure.*

*Key Words:* Human Life Quality, Determinants of Well – Being, Qualitative & Quantitative Research. JEL: I31, F68, C45

## INTRODUCTION

For most of the time, economics as a science focused only on hard measures, formulating graphs and models of quantitative nature. Classical economics assumes that individuals behave rationally, that they know what they want and how to get it, and thus make rational decisions. The assumption is they derive pleasure mainly from consumption so in theory the higher income the better. This vision, however, has been questioned by new, emerging fields of economics that advocate more multidisciplinary approach namely behavioral economics and economics of happiness. Helliwell, Layard & Sachs (2013) observe that “*We increasingly understand that we need a very different model of humanity, one in which we are a complicated interplay of emotions and rational thought, unconscious and conscious decision-making, “fast” and “slow” thinking*” (p. 5).

Happiness studies are highly controversial, having many opponents but a growing number of supporters as more and more researchers, policymakers and ordinary people agree that happiness should be a factor in determining a country’s wealth. Nevertheless, the tendency to equate income with well - being is deeply rooted in our society, which can be read in Pigou’s (1932) words: “*There is a clear perception that changes in economic welfare indicate changes in social welfare in the same direction, if not in the same degree*” (p. 3). This widespread belief is especially misleading when it comes to high – income nations where living standards are above basic material needs. Graham (2009) states that “*The economics of happiness does not purport to replace income - based measures of welfare but instead to complement them with broader measures of well – being*” (p. 8).

At the same time, the modern science of economics demands and requires measures and models that can be subject to comparisons, empirical verification and ease of application. For these reasons the authors of the present paper saw the need for an indicator that could include qualitative determinants of happiness and well - being into existing qualitative research, but at the same time still be conform to existing scientific standards.

# GROSS DOMESTIC PRODUCT AND WELL – BEING

Over past 80 years growth of Gross Domestic Product has become synonymous with growth of national welfare. However, the limitations and shortcomings that were mentioned before clearly show that GDP should not be used as a yardstick of society's well - being. Costanza, Hart, Posner & Talberth (2009) say that *"Economists have warned since its introduction that GDP is a specialized tool, and treating it as an indicator of general well - being is inaccurate and dangerous"* (p. 8). Helliwell, Layard & Sachs (2013) see GDP and GNP as *"a valuable goal, but should not be pursued to the point where economic stability is jeopardized, community cohesion is destroyed, the vulnerable are not supported, ethical standards are sacrificed, or the World's climate is put at risk"* (p. 9).

Fortunately, due to new emerging fields of science such as economics of happiness, more and more people including policymakers are aware of the need to go beyond GDP. Already the creator of GDP index, Kuznets (1934), stated that *"The valuable capacity of the human mind to simplify a complex situation in a compact characterization becomes dangerous when not controlled in terms of definitely stated criteria. Measurements of national income are subject to this type of illusion and resulting abuse, especially since they deal with matters that are the center of conflict of opposing social groups where the effectiveness of an argument is often contingent upon oversimplification"* (p. 5 – 6).

Happiness research shows that there are other factors that matter at least as much as income. GDP does not capture them, and therefore its picture of well - being is distorted. Fig. 1 shows that economy and well - being are much more complicated issues. Costanza, Hart, Posner & Talberth (2009) support that thesis by saying that *"By measuring only marketed economic activity, GDP ignores changes in the natural, social, and human components of community capital on which the community relies for continued existence and well - being. As a result, GDP not only fails to measure key aspects of quality of life; in many ways, it encourages activities that are counter to long-term community well - being"* (p. 9).

**Figure 1: Economy as part of a larger system**

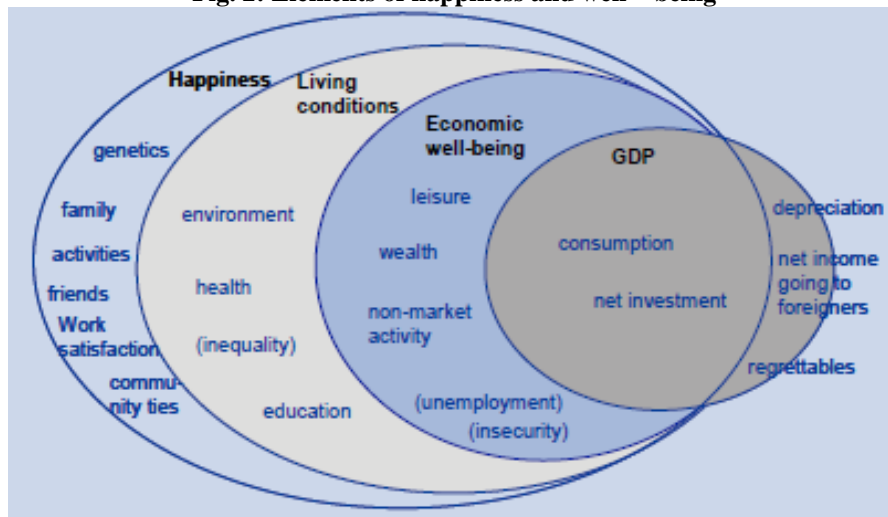


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Source: Costanza, R., Hart, M., Posner, S., Talberth, J. (2009, p. 8).

Among many factors contributing to the happiness of individuals, it is the income that has been studied the most. The assumption of the classical economic theory is rather straightforward – happiness increases along with the increase in income. This ‘money buys happiness’ approach is in fact misleading as the relationship between income and happiness is much more complex. Easterlin (1974) discusses this issue extensively and abolishes empirically this simplification (Easterlin Paradox). Easterlin's findings have been proved by many other researchers, i.e. di Tella, MacCulloch & Oswald, Graham, Frey & Stutzer, Veenhoven and others. Bergheim (2006) points at the fact that human well – being is a complex issue, composed of many elements of qualitative and quantitative nature. Fig. 2 shows this fact in a compact, graphical way.

**Fig. 2: Elements of happiness and well – being**



Source: Bergheim, S. (2006, p. 3).

First chapter's conclusion can be summarized in two sentences. Firstly, Gross Domestic Product is far from being a good measure of the overall well - being but is commonly understood and used as one. Secondly, the relation between income and happiness is a rather complicated one and, at the same time, counterintuitive. The authors believe that the first step to stop the misuse of GDP is to make the researchers aware of limitations of standard economic indicators and eventually replace them (or back them up) with more precise indexes. Following chapters aim at being a step towards this goal.

## GROSS NATIONAL HAPPINESS VS GDP / GNP

A pioneer in applying the enhanced theory of well – being into national policy – making is Bhutan. In the beginning of the 1970s, it introduced the concept of Gross National Happiness and made it the leading measure of well – being of Bhutanese citizens. Ura, Alkire, Zangmo, & Wangdi (2012) define it by stating that “*Gross National Happiness (GNH) measures the quality of a country in more holistic way [than GNP] and believes that the beneficial development of human society takes place when material and spiritual development occurs side by side to complement and reinforce each other*” (p. 7). The supremacy of the GNH over GNP has been enforced by Bhutan's constitution (2008): “*The State shall strive to promote those conditions that will enable the pursuit of Gross National Happiness*” (Article 9, §2, p. 18). The concept is more than just a guideline or an inspiration, it is used to define public policy. The officials' aim is that every major decision in this little Himalayan kingdom contribute to the growth of GNH. Table 1 shows the composition of the GNH Index, where 33 indicators have been divided into 9 groups:

The weight attributed to each group is the same as each group is believed to be equally important for happiness. However, particular variables inside each group differ in terms of weight with highly subjective ones given lower importance (show in Table 2):

To understand the composition of Gross National Happiness Index one has to look into each of its nine dimensions. Ura, Alkire, Zangmo & Wangdi (2012) describe them in the following way:

- **Psychological Well - Being** – includes life satisfaction with respect to health, standard of living, occupation and family relationship, expressing positive emotions such as compassion or generosity as well as negative ones such as jealousy or anger. Spirituality is also included by asking such questions as: *Do you consider Karma in the course of your daily life?* or *How often do you meditate?*
- **Health** – describes health condition of the population. It includes self – reported health (*In general, would you say your health is...*), number of healthy days within the last month, long term disability and its effects on daily activities, as well as mental health (conditions such as depression or anxiety).



**Table 1: Overview of GNH domains and indicators**

	Domain	Number of Indicators
1	Psychological wellbeing	4
2	Health	4
3	Time use	2
4	Education	4
5	Cultural diversity & resilience	4
6	Good Governance	4
7	Community vitality	4
8	Ecological diversity & resilience	4
9	Living standards	3
	<b>Total</b>	<b>33</b>

Source: Ura, K., Alkire, S., Zangmo, T., Wangdi, K. (2012, p. 22).

**Table 2: Weights on the 33 GNH indicators**

Domain	Indicators	Weight	Domain	Indicators	Weight
Psychological Well - Being	Life satisfaction	33%	Time Use	Work	50%
	Positive emotions	17%		Sleep	50%
	Negative emotions	17%	Good Governance	Political participation	40%
	Spirituality	33%		Services	40%
Health	Self - reported health	10%		Government performance	10%
	Healthy days	30%	Community Vitality	Fundamental rights	10%
	Disability	30%		Donation (time & money)	30%
	Mental health	30%		Safety	30%
Education	Literacy	30%	Ecological Diversity & Resilience	Community relationship	20%
	Schooling	30%		Family	20%
	Knowledge	20%		Wildlife damage	40%
	Value	20%		Urban issues	40%
Cultural Diversity & Resilience	Zorig Chusum skills (Thirteen arts & crafts)	30%	Living Standard	Responsibility towards environment	10%
	Cultural participation	30%		Ecological issues	10%
	Speak native language	20%		Per capita income	33%
	Driglam Namzha (Etiquette)	20%		Assets	33%
				Housing	33%

Source: Ura, K., Alkire, S., Zangmo, T., Wangdi, K. (2012, p. 26).

- **Education** – education in Bhutan serves not only the purpose to educate Bhutanese citizens but also to instill in them a sense of common values, their cultivation and transmission. It includes literacy, educational qualification and knowledge with questions ranging from *How would you rate your knowledge on how HIV/AIDS is transmitted?* to *How would you rate your knowledge and understanding of local legend and folk stories?* Values are also included, for example *Is lying justifiable?*

- **Culture** – Bhutan has long maintained a policy of cultural isolationism in order to protect itself from foreign influences. Until recently there was a restriction on the number of tourists allowed to enter the country. Preservation of the unique culture is one of the main goals of the Bhutanese government. Measurement of this dimension includes language (*How well can you speak your mother tongue, now?*), artisan skills (*assesses people's interest and knowledge in thirteen arts and crafts, collectively known as Zorig Chusum*), socio - cultural participation and *Driglam Namzha* – the Way of Harmony which refers to expected behavior (of consuming, clothing, moving) especially at formal occasions and in formal spaces.

- **Time Use** – this dimension measures mainly the balance of work and leisure. Emphasis is put on the free - time of Bhutanese citizens as it is thought to be very important for the overall happiness. What is interesting, there is a distinction made between paid and unpaid works such as childcare or voluntary works. Sleeping hours are also captured.
- **Good Governance** – includes political participation, political freedom (i.e. *Do you feel that you have a right to the freedom of speech and opinion?*), service delivery that captures for instance distance from the nearest health care center and government performance (i.e. *Rate the performance of government in creating jobs...; in reducing gap between rich and poor...; in fighting corruption...*)
- **Community Vitality** – concentrates on the social capital: social support, community relationships (i.e. *How much do you trust your neighbors?*), family (i.e. *Do the members of your family care about each other?; Do you feel like a stranger in your family?*) and crime indicator.
- **Ecological Diversity and Resilience** – the environment has always played a very important role in the lives of the Bhutanese people. Citizens are asked about pollution, their attitudes towards environmental responsibility, wildlife and urban issues such as, for example, inadequate green spaces.
- **Living Standards** – concentrates on material well - being and includes individual and household income, assets (appliances such as mobile phones, television or personal computers, livestock ownership and land ownership) and housing quality (pp. 116 – 119).

In today's World still suffering from global financial crisis, growing income gap and tremendous inequalities, more and more Westerners are beginning to redefine their understanding of well – being. Therefore Bhutan's approach is attracting more and more interest. Thottam (2012) states that “*Bhutan's happiness experiment has captured the fancy of economists and politicians from Brazil to Britain, Tokyo to Taiwan, who are looking for a new path to free-market prosperity - one that doesn't do so much damage to the environment, social equity and family life*” (p. 2). Between Western countries that are testing various options of implementing indexes similar to GNH into their home policies are *inter alia* Canada, China, France, Great Britain and USA.

The question arises, whether it is possible to use the Gross National Happiness as a direct substitute for GDP (or GNP)? The answer is not a simple one. First of all, the concept of the Bhutanese index lies in its history and culture. The survey includes questions related to such issues as *Karma, Tshogpa, Tshechus* or the knowledge of traditional songs and legends which are in most cases incomprehensible outside Bhutan. Each of the nine dimensions was designed to suit Bhutanese values and principles perceived as necessary components of a happy life. Moreover, Bhutan's indicator defines happiness differently than Western civilizations.

Therefore, due to cultural differences, GNH cannot be directly incorporated into measurement of other countries' and cultures' well – being. Another issue is the subjectivity – the GNH index is based on periodic surveys. It might not be reasonable to conduct policy relying only on people's subjective judgments. What is more, while GDP and GNP have many disadvantages, their great strength is the possibility of comparison over space and time. With the GNH international comparison of a nation's well – being would be difficult. Moreover, such purely subjective indicators might be more prone to biases as governments might define the surveys and their results for their own benefit. Finally, besides measuring happiness, researchers have to be able to interpret the results and use them to improve the policy – making. Therefore there is a need for an indicator, that would connect subjective and objective drivers of happiness, as well as best features of GDP and GNH in one aggregated index.

## AGGREGATED HAPPINESS INDEX PROPOSAL

When searching for an aggregated index of happiness no conscious researcher would omit the role of income and income – related factors that are measured by GDP and GNP indexes. Nevertheless, as this issue has been extensively discussed in economic literature, the authors decide to focus further on other measures of human well – being, dividing them into subjective and objective ones.

In UN World Happiness Report 2013 Helliwell, Layard & Sachs propose such measures of subjective well – being as Social Capital & Trust, Governance & Freedom, Mental Health, Family & Marriage or Loving & Being Loved (pp. 69 – 79). Although for the purposes of evaluation of happiness in Western cultures this set could be easily enlarged by most of the components of GNH, the subjectivity of assessment makes this group of

indicators less interesting for the purposes of presented research. The authors prefer to search for their own Aggregated Happiness Index (AHI) instead.

Out of many determinants of well – being presented before, are there any that could be seen as objective ones? The authors believe that at least four can be distinguished: Health, Unemployment, Income and Inequality. Different studies, i.e. Graham's (2005) have shown a high correlation between happiness and these four factors. As Graham's (2009) understanding of particular determinants sometimes varies from this of GNH creators, each of them has been shortly described below:

- **Health** – people evaluate good health as one of the most important aspects of their lives. Good health is linked to higher levels of happiness, and health shocks – such as serious diseases or permanent disabilities – have negative and often lasting effects on happiness. At the same time, a number of studies find that happier people are healthier. Causality seems to run in both directions. It is important to notice that emotional health is as important as physical. There are different ways to evaluate health but the most popular objective ones include life expectancy at birth and infant mortality (under 5);

- **Unemployment** – Helliwell, Layard, & Sachs (2013) find out that there is no doubt that unemployment reduces happiness significantly. When people become unemployed they experience sharp falls in well – being and their well – being remains at this lower level until they are re-employed (p. 66). Graham (2009) continues by saying that it is important to remember that losing job does not only mean lost income as many economists would assume, it means much more to an individual and is often compared to break – up of marriage. It is connected with the feeling of needlessness, loss of social status and crash of self – esteem. It also affects family of the unemployed. Long – term unemployment (over 12 months) has particularly negative economic and social effects.

- **Income** – research shows that there is a correlation between subjective social welfare and income, but only to a certain point. It is crucial to understand income as something more than a measure of economic activity. Stiglitz, Sen & Fitoussi (2009) say that in order to measure individuals' well – being, there is a need for certain adjustments of the GDP. One of the most comprehensive concepts of measuring income by far is so called household net – adjusted disposable income. Typically, we subtract taxes to obtain a measure of disposable income of a household. Individuals do not directly get enjoyment out of the taxes they pay, but they do benefit from the services that government provides, and that is why it is important to add back the correct value of public services. The cited researches underline that a few other adjustments are required to be taken into account, namely intermediate goods, security, defensive expenditures, leisure, nonmarket activity and depreciation, resource depletion, and the degradation of environment. The first three adjustments (combined with others) give us a measure that is sometimes referred to as adjusted disposable income (p. 35).

- **Inequality** – income inequalities have risen substantially over the past years which causes serious economic and social effects. Scholars have shown that there is a way of reducing income inequality and improving economic efficiency at the same time. There is no tradeoff between equity and efficiency as it was previously believed. But does inequality affect our subjective well – being? Different studies reveal that a link exists. Empirical evidence shown by Gini index measurements show that in more unequal societies individuals feel less satisfied with their lives. Moreover, inequality matters as people have a tendency to compare their well – being and the well – being of others which greatly affects life satisfaction (pp. 151 – 155).

The proposed Aggregated Happiness Index (AHI) is a simple, but meaningful average of four equally weighted objective indicators (income, health, employment and inequality), that are composed of one or two sub – indicators. Each sub – indicator is an average measure of a given issue in relation to its superior indicator. In consequence the total number of variables equals six. The components of our index are listed below:

- Income indicator:
  - Household net – adjusted disposable income (reference year: 2010);
- Employment indicator:
  - Employment rate (reference year: 2011, with the exception of Brazil – 2009);
  - Long term unemployment (reference year: 2011);
- Health indicator:
  - Life expectancy at birth (reference year: 2011 with the exception of Turkey, Mexico – 2012 and Canada – 2009);
  - Infant mortality (reference year: 2009);
- Inequality indicator:

- Gini Index (reference year: 2009 with the exception of Australia, New Zealand, USA – 2010).

As ease of application was one of authors' main concerns, the computation of Aggregated Happiness Index has been simplified to the most possible extent. Its application needs the following consecutive steps:

1. Extraction of raw sub – indicator data from credible sources (here OECD Statistics). Sub - indicators with a negative sign, such as infant mortality, long – term unemployment and Gini index) were converted to positive values by using their absolute value. Authors' goal was to base the indicator on most recent data. Nevertheless for some countries reference years may differ (due to lack of adequate data – which should be always clearly stated, in order not to disturb comparative studies). In each case of reference period change, data from previous years has been checked for the possibility of radical changes of environment (as a result of i.e. external or internal shocks).
2. Calculation of the relative value of each of six sub – indicators. Relativization is necessary to put raw data into an analytic context – in our case the group of countries understood as top, middle and bottom benchmarks of the comparison. Eq. 1 shows the formula to be applied:

$$\text{Sub – indicator value} = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}} \quad [\text{Eq. 1}]$$

3. Calculation of average values of indexes composed of more than one sub – index. As we see our model as developmental, more sub – indexes than two could be considered in the future. Average values are calculated through adding all sub – indexes belonging to one index and dividing their sum by their number. The value of indexes described by one sub – index only is equal to the sub – index itself.
4. Attributing weights to each of four indexes. Although in our research weights of all four indexes have been set on equal level (0,25), the model leaves the opportunity to adjust the weights of particular indicators, if needed. This would make sense i.e. in analyses of countries at different stages of socio – economic development. One could assume, that in countries at lower development levels a slightly higher weight should be attributed to income and employment stability, whereas countries that have achieved financial stability would focus more on distribution of wealth and health of their citizens.
5. Presentation of final results in the aggregated, tabular form, with countries grouped by their index rank or any other useful criterion.
6. Interpretation of obtained results.

Table 3 presents the final result of AHI calculation. Datasets have been taken from respective OECD reports.

**Table 3: Aggregated Happiness Index**

			Income	Employment		Health		Inequality
INDEX RANK BY COUNTRY		INDEX VALUE	Household net adjusted disposable income	Employment rate	Long – term unemployment rate	Life expectancy	Infant mortality	Gini Index
Norway	1	0,907	31459	75	0,38	81	2,8	0,25
Switzerland	2	0,859	30060	79	1,57	83	3,8	0,30
Sweden	3	0,842	26242	74	1,29	82	2,5	0,27
Luxembourg	4	0,838	35517	65	1,41	81	3,4	0,28
Austria	5	0,831	28852	72	1,07	81	3,9	0,27
Iceland	6	0,823	21201	79	1,97	82	2,2	0,27
Denmark	7	0,808	24682	73	1,85	80	3,4	0,24
Finland	8	0,808	25739	69	1,75	81	2,3	0,26
Netherlands	9	0,802	25493	75	1,49	81	3,8	0,28
Germany	10	0,792	28799	73	2,84	81	3,4	0,29

Australia	11	0,787	28884	73	0,96	82	4,1	0,33
Canada	12	0,767	28194	72	1,00	81	4,9	0,32
Japan	13	0,754	24147	70	1,78	83	2,3	0,34
France	14	0,752	28310	64	3,83	82	3,6	0,29
Belgium	15	0,743	26874	62	3,45	81	3,6	0,26
New Zealand	16	0,725	21892	73	0,59	81	5,5	0,32
United Kingdom	17	0,713	26904	70	2,62	81	4,2	0,35
Slovenia	18	0,700	19119	64	3,61	80	2,5	0,25
United States	19	0,680	38001	67	2,80	79	6,2	0,38
Italy	20	0,677	24216	57	4,36	83	3,4	0,31
Korea	21	0,675	17337	64	0,01	81	3,2	0,31
Czech Republic	22	0,656	16957	66	2,80	78	2,7	0,25
Israel	23	0,618	19120	61	1,13	82	3,7	0,37
Portugal	24	0,592	19366	64	6,14	81	2,5	0,34
Spain	25	0,583	22847	58	8,99	82	3,2	0,33
Ireland	26	0,578	24104	60	8,52	81	3,8	0,33
Greece	27	0,527	20440	56	8,75	81	3,8	0,33
Poland	28	0,522	15371	60	3,05	77	5,0	0,30
Slovak Republic	29	0,477	16682	59	8,65	76	5,7	0,26
Hungary	30	0,451	13858	56	5,36	75	5,3	0,27
Estonia	31	0,449	12800	65	7,06	76	3,3	0,31
Turkey	32	0,285	13044	48	2,59	75	7,8	0,41
Chile	33	0,267	11039	61	2,94	78	7,4	0,51
Mexico	34	0,240	12732	60	0,11	74	14,1	0,47

Source: own elaboration based on OECD StatExtracts from <http://stats.oecd.org/>

The results of the indicator are not surprising with Nordic countries together with Switzerland and Luxembourg being at the top and countries such as Mexico, Chile, Turkey ranking the lowest. The most interesting insight is the case of the USA. Even though it has the highest income per household it ranks 19<sup>th</sup> while according to the HDI it is 3<sup>rd</sup> (2013). This is mainly due to very poor results in health and inequality dimensions. Despite huge expenditure on health service infant mortality in the USA is comparable with those in Turkey and Chile. As far as inequality is concerned, USA has a very unequal, stratified society with huge wealth differences between the richest and the poorest. The example of the USA is a case in point of the beyond GDP approach. Sweden provides another interesting insight – its income per household is around 12 000 US dollars lower than in the United States. Still, despite much lower income, it ranks 3<sup>rd</sup> as it has very low unemployment, excellent achievements in the health dimension and, as all Nordic countries, a very equal society. It is worth mentioning that Portugal, Spain, Ireland and Greece are four countries that have been very severely touched by the global financial crisis. It is reflected in the indicator as they all rank rather low mainly due to very high long – term unemployment.

## CONCLUDING REMARKS

Indicators are an inherent element of policy – making. They help understand complex issues by breaking them down into smaller components and outputting a single composite value or dashboard of values. They provide information to help prevent or solve existing problems. They frame debates and problems so that we can better understand and quantify them. It is crucial that indicators are used in policy – making, because they guide the society towards pre – set objectives and show policy – makers to which extent they have been achieved. Indicators are needed as what has not been measured cannot be managed.

The authors of this paper aimed at creating an indicator that would integrate financial, quantitative aspects of human lives with other, less tangible and of qualitative nature. But there was also a need to avoid distortions coming from subjectivity of data. The choice of sub – indexes was mainly driven by this necessity. Also data sources have been chosen carefully, with special focus put on their credibility (OECD, Gini Index). Unfortunately this last feature shows a weakness of the proposed index, as OECD Statistics do not include other countries than Member States of the Organization. Also the household net – adjusted disposable income is a sub – index at present available only for OECD countries. Nevertheless if credible source of data or a sub – index of similar construction is found it would be very easy to substitute respective parts of the presented model.

The authors of this paper believe that research on happiness and well – being will be continuously present in modern economic research, both of empirical and conceptual nature. Taking into account subjective components of well – being can contribute to overall increase of quality of human life. The Aggregated Happiness Index can be seen as a step providing ground for further discussion about incorporating qualitative measures into economic research.

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# **SOCIAL NETWORKS OF MEXICAN MIGRANTS IN THE UNITED STATES AND ITS IMPACT ON THE TECHNOLOGY AND BUSINESS DEVELOPMENT IN THEIR COMMUNITIES.**

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## **ABSTRACT**

*The article discusses the importance of social networks of migrants and the knowledge transfer in the creation of a producer of tomatoes located Zinapecuaro community in Michoacan, Mexico. This town has a high rate of migration to the United States. It was created at the initiative of farmers in this community who spent most of his life in California, United States, working in the field. Back in their homeland and decided to dump the traditional farming knowledge and professional experience abroad, in promoting a business project which favors local and regional development. To this end they set up a company producing tomatoes, which implemented hybrid procedures "hydroponic", which put together traditional knowledge and modern technology. Qualitative methodology was essential in the research. Interviews with the director of the company and other partners' emigrants were performed, and participant observation conducted over a full production cycle. The study examines innovation as a change agent in agricultural techniques.*

**Keywords:** networking, knowledge transfer , technology and innovation.

## **INTRODUCTION**

Migratory movements are among the major global phenomena of our time. It is usually due to the search for better living conditions and are determined by complex economic and cultural, political, social. In particular, the migration of Mexicans to the United States has more than a century, even though its characteristics have changed over time. Such diverse elements as proximity, the migration agreements, social networks and asymmetric economic context determine conditions that drive our citizens to cross the border to work primarily in the field and in construction.

Traditionally, the States with greater migration to the northern neighbor are: Zacatecas, Guanajuato, Jalisco, Michoacan , Durango, San Luis Potosi and less Colima and Aguascalientes (Rodríguez 2003). Moreover, in recent years have been present elsewhere, such as Veracruz, Puebla, Mexico, Federal District, Guerrero, Oaxaca, Morelos and Hidalgo (INEGI, 2000). There have also been changes in traditional migration patterns (in terms of age , sex, length of stay and return , education, etc. ) And the uses of resources in their communities have set a new panorama of Mexican migration to the United States. In this context, social networks among migrants favor the exchange and circulation of people, goods, money. information and knowledge, so that the settlements of people on both sides of the border can be seen as a community scattered in many places .

This paper aims to analyze the knowledge transfer from Michoacán migrants when they go to work in the United States and after a while they return to their home communities with innovative ideas and practices. The study focuses on the use of technology to grow tomatoes in greenhouses through hydroponic technique. The research was conducted from a case study of a company that produces greenhouse tomatoes in the community



Zinapécuaro , Michoacan , Mexico , consists mainly of migrants. They conducted interviews with the director of the company and some employees (both migrants and non-migrants) and participated as a worker over a full production cycle (land preparation , planting and harvesting of tomatoes ) . A guide for the interviews was developed, although many important issues were arising in an improvised manner over the course of the conversation.

## MICHOACAN MIGRATION TO UNITED STATES

Among the main factors driving the migration process are lack of work opportunities (due to socioeconomic conditions in sending communities, social insecurity in the communities, lack of government support to the agricultural sector, degradation of agricultural land , the low level of income from agricultural activities , the migratory tradition in some regions and the demand for labor in various productive sectors of the economy of the northern neighbor .

In communities, international migration "represents an adjustment to the unequal distribution of land, labor and capital, particularly arising from economic development" (Massey et al., 1991). Economic difficulties impact differently in different social sectors, agriculture being one of the most affected. Increased agricultural ejido or common land for only agricultural purposes (late sixties) and the incorporation of technology and tractors caused an increase in unemployment. Besides an increase of laborers because " increases with the sons of former laborers and ejidatarios (owners of the common land), besides the farmers from other towns and ejidatarios who have lost their land, work for them has decreased " is presented (Trigueros and Rodriguez, 1988). However, Michoacan migration occurs not only by workplace inequity and crisis in the country, is also generated from the anthropological and social, because young people want to " live" the adventure of going to "the other side" and return being "men" . In this regard, López Castro ( 2003) mentions that migration represents for many young people a rite of passage because the entire community has internalized the motto : "Try the North and become a man". Similarly, Fonseca (2003 ) states that the boys not only cross the border by the difference in salary, but also the challenge of returning them to the communities of origin : return with better clothes , with gifts for their families with technological objects and stories of travel and the places where they work and reside.

Among the Mexican states with the highest migration intensity towards the northern neighbor, Michoacán occupies one of the top positions. The impact on society and the economy is very remarkable, and determines, among other things, a human trained work force, professional and usually a lot of initiative. This human capital flight seen in Zinapécuaro , one of the Michoacan municipalities considered very high migration. It is located northwest of the state , about 50 km from the state capital, at a height of 1,880 meters above sea level , bounded on the north by the state of Guanajuato, with Maravatio west , south to Hidalgo, and Querendaro west. It has 44.122 inhabitants and has various utilities : electrification (75 % ) , water (80 % ) , public safety ( 100%) and public ( 70 % ) lighting among others.

Zinapécuaro community is rich in natural resources. It has five rivers and cold and hot water, which makes it a suitable place for agriculture. Corn , sorghum , wheat and vegetables mainly grown . Since 2005, cultivates the tomato greenhouse , thanks to investments of migrants are in the United States, primarily in the state of Illinois, very motivated to keep the business growing.

It can be said that there are two communities of hometown Zinapécuaro Michoacan: one in Mexico and one in the United States, his interaction is vital and increasingly dynamic. Such interaction and dynamism is achieved through the formation of social networks, which perform several functions , including maintaining communication links between families, social support projects that benefit communities, organize people to form companies or rural cooperatives legally support the development of projects and creation of productive enterprises .

Through social networks, Mexicans in the United States (and more specifically from Michoacan) have been organized since 1998 , to form countrymen clubs, they are having a strong influence on the committees of their communities, where they decide the works and projects that will be supported with program benefits, as the Citizens' Initiative program 3 x 1 ( Lopez, 2003).

The Citizens' Initiative 3x1 program has its origins in Zacatecas in 1992 . At the time the program was called 2x1 and was established in order to support Zacatecas migrants clubs in the United States. These clubs had more than three decades working in solidarity activities organized for migrants themselves (deaths, transfers, diseases, etc. ) and in their communities of origin so (support for the restoration of churches, schools , municipalities , etc.). . The purpose of the program was to support the financing of investment projects , where every dollar contributed by migrants, the state government and the federal government each contribute with a dollar more. In 1999, the program changed mode of 2x1 to 3x1, to also involve the mayors of the state, which became in turn contribute one dollar (García , 2003).

In Michoacán , the 3x1 Program Citizens' Initiative became operational on July 6, 2002 , in response to the Federal and State Governments to meet the demand of Mexican nationals who reside abroad to co-participate in building productive projects or social benefit in the communities of origin .

For these projects are carried out should have the following characteristics:

1. Address the initiatives of migrants living preferably abroad, integrated in clubs or organizations.
2. Having the participation of migrant clubs or organization, the Federation of the federal entity and the relevant municipalities.
3. Help address gaps in basic infrastructure, services, or create sources of employment and income for the population.

In other words, the Program Citizens' Initiative 3x1 aims to support the initiatives of migrants abroad, to realize projects through the concurrence of resources of the federation of states, municipalities and migrants , by promoting fairness and gender mainstreaming in program benefits . For every dollar you invest the migrant , the federal , state and local governments pay a dollar each .

Some projects which have been developed from this program are: the construction of public libraries with computers in some communities where migrants children communicate with their families, and remodeling, maintenance and construction of public spaces such as churches, schools , soccer , rodeos pitches , and the creation of productive enterprises like greenhouses of tomatoes.

## **THE COMPANY TOMATOES IN ZINAPÉCUARO**

Atzimba Producers Committee was founded in February 2005. It consists of 50 members, all of them migrants. About half are located in Chicago, Illinois, and the other half in Zinapécuaro , Michoacan . Also collaborate employed 15 people, some of them have been migrants , others are members of the company, and sometimes just work to get ahead in the community. This company, as mentioned above, has been supported by the Citizens' Initiative 3 x 1, which has encouraged its members to make their contribution in equal parts , with other government agencies Program .

Entrepreneurship Atzimba Producers was - and still is on the one hand , the capitalization of its production unit and the continuous training of its members, and in another hand an employment generation project. Thus investing in a project with quality and productive capacity, which results in economic, ecological, social and cultural improvements in the community.

The company started with two ships or greenhouses. The type of seed is called semi-hydroponic because plants are on a plastic bag, and by means of drip irrigation receive water and nutrients needed to grow. It is important to note that technology is most widely known as hydroponic, in which plants are on water, and so grow up and get all the nutrients.

Later two greenhouses were built. The technique used to grow on these ships is different, and do not use plastic bags, but plants in furrows sown directly into the ground . Thus able to increase water and fertilizer.

In this regard, according to the observations made in this process, plants were sown directly in the ground grew faster and productivity increased. However, with the second seeding more land preparation and

control is needed to prevent the spread of pests. Importantly, the implementation of the technology used in both culture techniques is due in large part to the transfer of knowledge that migrants have learned in neighboring North and implementation they have made in their communities.

## **KNOWLEDGE TRANSFER IN THE FORMATION OF A PRODUCTIVE ENTERPRISE**

Knowledge transfer is a "node " between the bonds that make up the network of the company in question . In the production stages of tomato are clearly observed . On one hand, is the art of planting seedlings in bags with their emitters and , on the other hand , the technique of planting directly in the ground, in the grooves previously formed .

The first seeding is done following suggestions supplier of gases. The second initiative was the company president and partner with in an effort to investigate which of the two techniques means more production and requires less care.

The idea of innovation in relation to techniques for plant also responds to the experience of the director of the company (Mr. Juan Jose ) and some partners in growing fruits and vegetables in the United States. The director of the company has the experience of working in the vineyards in Napa, California, and the knowledge learned - specific grafting grapes - have given a very important added value when proposing and designing innovation strategies in agriculture.

In this regard, Mr. Juan Jose said :

“The work of us was to modify the grape, and no longer do what we did before by completely removing the grape root , but we cut the stem to a height and then we put the graft and 3 or 4 months was already pulling product of the new variety , and not here. Already after one begins to investigate what types of grafts there, why some , why others.

In the Napa Valley, is a college where there are engineers who are dedicated exclusively to the wine, and they see what is the best graft and we transmit to us” ( Interview with the director of the company , Israde , 2006-2007).

Knowledge transfer is initiated with the director's brother, who invited him to work in Napa and explained how to graft the grape. After college engineers gave training to improve their technique they learned empirically. Many years of work in the vineyards allowed familiar with techniques related to agriculture and now, in the greenhouse, have allowed the tomato plant and crop improvement technologies. In this sense, the knowledge acquired directly or indirectly (explicit or implied ) by the director, to implement them in planting tomatoes , they become even more valuable knowledge so because they can compare and contrast the two techniques used in the production cycle of tomato .

According to Nonaka and Takeuchi ( quoted by Lopez, 1995 ) there are two types of knowledge: explicit and tacit . The first regarded as objective and rational , which can be expressed in words , formulas , numbers, etc. The second is knowledge that you have in mind a person, organization, community or country is immersed in their culture and is difficult to explain because it is not in writing , at any time, intentionally or not, comes to light . This knowledge consists of ideas, experiences, skills, values, customs , beliefs , history, knowledge of the ecological , social, rules (unwritten ) etc. . In this sense, the director of the company not only complements your skills and experiences to sow tomato, also draws on the lessons in the past has given her father. Valuable knowledge that is tacitly transmitted from generation to generation , and they allow you , for example, to determine when is the best time to plant and harvest , when " the rains " , etc. . In that case, Mr. Juan José says what his father said to him:

Are also important lunar cycles , and have to see what kind of plant it is . To transplant has to be new moon, and when well and is crescent and up the stem. If planted crescent will not rise. If pruning when the water is just above the ground. It should be pruned when the water is down in the roots ( Interview with director of the company , Israde , 2006-2007) .

The learned knowledge (explicit ) plus the knowledge and skills they have from childhood (tacit ) make the idea of innovation is present in each of the conversations you had with Mr. Juan José . For example, innovation in the method to plant both bags and furrows in the correct use of the quantities of fertilizer and seed the same product . In this regard says : "If now prevails motivation to plant the tomatoes in greenhouses , time of planting organic tomato greenhouse " ( Interview with Juan José , Israde , 2006-2007) .

The motivation to make changes in the methods of planting and the desire to stay ahead of the competition make a very important innovation for productive enterprise development element. People returning to their places of origin, in most cases, are aware that they have developed new skills to perform their tasks , both personal , and occupational , and some others have had the opportunity to specialize . The cases of Mr. Juan José and some partners show that it is possible to achieve the goals of the company, by generating innovative ideas . As seen above, when analyzing different methods for planting in bags or in rows on the ground , they can compare and improve their procedures in the following production processes.

## CONCLUSIONS

Knowledge Transfer from migrants when they return to their communities, after they have worked in the United States, has a major cultural impact. Such impact is reflected in the present case study, often in innovative ways to conceptualize a complete production cycle. The research shows the relevance of social networks from people who have the illusion or the need to go to work in United States in order to find a job in the shortest time possible and their town and families. In addition, social networks facilitate their membership or association with a social group, or a social club, which allows them to organize to meet social and economic resources , which are designed to make improvements in their community of origin, and in other cases , oriented start-ups .

Knowledge Transfer contributes to innovation , provides an opportunity for the company to be aware of the technological advances that exist in relation to production processes. It is important to note that innovation does not necessarily implement cutting edge technology and techniques. Many times, people find the solution to agricultural problems in traditional knowledge , which does not mean taking a step back, but becomes a strategy to promote dialogue between tacit and explicit knowledge , including traditional and modern knowledge.

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# **THE ROLE OF DIGITAL NETWORKS IN CONTEMPORARY PUBLIC DEMONSTRATIONS**

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## **ABSTRACT**

This document addresses a theoretical review about two concepts and their relationships: social movements and networks. It has attempted to discuss the role of social networking in the contemporary public mobilizations at home and abroad, where information technologies played a key role. Such technologies are not only basic instruments for organizing social movements and global connection of individuals but also represent a political and power mechanism. Now it is time, therefore, to understand the role of the social networks in contemporary society. Otherwise, we might stay on the sidelines of the major transformations to be supported by the social networks.

*Keywords:* Information technologies; Internet; Social networks; Public demonstrations.

## **INTRODUCTION**

This document addresses a theoretical review on two concepts and their relationships: social movements and networking. In general, it has attempted to discuss the role of social networking in the contemporary public demonstrations occurring at home and abroad. As discussed herein below, information technologies have played a key role in the emergence of recent public movements.

These technologies have not only become extremely important tools for organizing social movements and global connection of individuals, but also represent a political and power mechanism. This is because the spaces created by the networks encourage the organization of civil society and have become points of contact to evidence the lack of structure in sectors, dissatisfactions and collective aspirations (Machado, 2007).

From this perspective, the Internet gives individuals the chance to register, disseminate and broadcast events, ideas, views and experiences relating to different issues. Fast, cheap and far-reaching communication makes the Internet today the main tool for coordinating citizens. The digital network has thus become a public space for reinforcing different kinds of demands (Machado, 2007; Pereira, 2011; Babo, 2013).

The transformations from the use of social networking are coming to the surface. Democratization of spaces and the increase in the population's influence on government decisions are now perceptible (Serradourada; Rincon, 2013). There is no doubt, for example, that the recent public mobilizations in Brazil are directly linked to the possibilities offered by digital networking.

Nevertheless, intensifying the use of social networking today has raised discussions about its potential and limitations. Moreover, with society's informatization, social movements in many countries have diversified

and grown more complex. Accordingly, some of the traditional explanations need revisions, given the emergence of new variables in the dynamics under analysis (Scherer-warren, 2006).

Now is the time, therefore, to understand the real role of social networking in contemporary society. Otherwise we could stay on the sidelines of the transformations in social behavior and of participating in the major world-impacting changes that probably will be supported by social networking.

## **THEORETICAL REFERENCE FRAME**

### **The revolution of information technologies and the network society**

Capitalism is undergoing a process of radical restructuring characterized, for example, by the increase in global economic competition; the decline of the influence of workers' movements; the individualization and diversification of labor relations; global integration of markets; and the development of the Asian Pacific region as a new industrial hub (Castells; Gerhardt, 2007).

According to Castells (1999), such capitalism is different from that shaped since the Industrial Revolution, or as a result of the 1930 Depression. This is technology-based informational capitalism that has transformed economic, production, power and social relations.

From this viewpoint, the advance of technological and communication systems – based increasingly on a universal language – is encouraging global integration of nations, institutions and people. Specifically, corporations are increasingly organized in networks both internally and in their relations with other businesses (Castells; Gerhardt, 2007).

Today, technology (or lack of) is the determining factor of society's transformations. Therefore, the prevailing system is not only capitalist but also informational, although presenting significant differences between countries, varying according to their history, culture and technology (Castells; Gerhardt, 2007).

Castells (1999) says that the revolution of information technology has given rise to a new form of society: the networking society; a new economy, information economy; and a new culture, the culture of real virtuality.

In general, social networking is a structure consisting of people or institutions connected by one or more types of relations, sharing common goals and perspectives, creating a social link in immaterial space (Serradourada; Rincón, 2013).

According to David de Ugarte (2013) contemporary changes are somehow linked to the social networks. Most new social and recent political phenomena have been started and boosted by this communication technology.

In this direction, in addition to the economic and organizational changes, the formation of networks transforms the domains of cultural and social life. If over the centuries, people who shared space and time created cultures, in the informational system a new culture emerges based on going beyond place and time. Now therefore new forms appear of interaction, control and social transformation (Castells, 1999).

Like the questions discussed above, informational and networking society has also changed social movements that unfold in different places. The following section discusses the "social movements" concept.

### **Social movements: concepts and interpretations**

Several theories strive to explain the behavior of social collectives since on one hand they gained visibility in society itself as concrete historic phenomena and, on the other, were responsible for rebuilding and building new theories about civil society. The complexity of the topic makes it a major source of studies and analyses. A short

review of literature shows how diverse it is in terms of approach and interpretation (Machado, 2007). In relation to its concept Castells (1999) defines social movements as collective actions that, depending on their success or failure, transform values and institutions.

Melucci (1996), on the other hand, emphasizes that this is an object constructed by the analyst, since it refers to a view for analyzing certain phenomena and does not coincide with the empirical complexity of the action. From this perspective, the author defines social movements such as collective actions based on solidarity and expressed in a dispute, which imply the break in the boundaries of the system's compatibility. The collective identity is built up by the interactions between individuals, which is why they are imbued with strong emotional components.

Along this line Bem (2006) argues that the social movement is a reflection of the complex social development mechanisms and evidences the sectors with lack of structure, collective aspirations and dissatisfactions, helping to visualize the social relations of the period under analysis. The author also adds that it is the most relevant indicator for analyzing how societies function.

A classical concept of social movement is to associate it with non-institutionalized processes and the political struggles that are fought in order to modify the prevailing distribution of rewards and sanctions, forms of interaction and cultural ideals (Alexander, 1998).

Machado (2007) reveals that the "classical" approaches predominated until 1960 and most currents associated the social movements with more widespread processes of transformations linked to the changes in industrial society. The extra-institutional collective action was interpreted as destabilizing. In other words, crowd behavior, especially of the working class, was always regarded with mistrust, since it represented a "danger" against keeping social order.

Alexander (1998) claims that the old social movements were associated with the notion of revolution, and emphasized issues such as power, violence, occupation and control. These approaches favored economic and material interests, relegating the moral and symbolic dimensions existing in social movements.

In recent decades, some researchers endeavored to examine how the cultural, emotional and moral questions play a leading role in social movements. Despite such efforts, Alexander (1998) reveals the limits of those studies. In other words, such subjective dimensions are regarded as means to a goal, not as desired ends in themselves.

The need to alter the classical approach to include the cultural dimension seems to lead to the study of the new social movements. This term emerged to designate the collectives that failed to find a satisfactory interpretation in the classical theory (Alexander, 1998; Machado, 2007).

The new social movements include groups supporting women's rights, environmentalists, anti-nuclear proliferation groups and those protecting civil and human rights. Generally they relate to sharing values associated with the rights of minorities, environmental preservation, freedom of expression, the right to culture, race and gender equality. Such demonstrations, mostly urban-based, were far from the classist nature of peasant and trade union movement (Machado, 2007).

The change in studies and understanding of the social movements occurred mainly as a result of the transformations of the international context driven, first and foremost, by the impacts of globalization. After the end of the cold war, public demonstrations were now considered relevant figures to promote civil and citizenship rights. At the same time, they played an important role as catalyst of the social demands not met by the State (Machado, 2007).

As a consequence of this contemporary view, social movements, even when conceived outside the State, were now regarded as the proper expressions of a plural political context rather than subversive expressions. In some nations, in fact, certain groups and social organizations are regarded as necessary in order to achieve democracy. Thus, there is also a notion of cooperation between State and civil society, overcoming the approaches that only consider disputes (Machado, 2007).



A number of researchers have stressed both the importance of democracy for social movements and the latter's importance for democracy (Alexander, 1998; Machado, 2007). Therefore, in the 21<sup>st</sup> century, social movements have played a role in democratic governments to represent claims from different areas of society (Machado, 2007).

## **Role of information technologies and networking in social movements**

The Internet and communication media are the main instruments used by the social movements for disseminating their causes, sharing their aims and thereby successfully attracting people. Castells (2013) says that with the transformation of communication technologies new possibilities for self-organization and self-mobilization of society have been created, crossing the barriers of censure and repression imposed by the State. Many dissatisfied social groups with public authority do not believe in voter participation as a way to change and seek other mechanisms to express their interests and positions (Pereira, 2011).

Accordingly, digital communication networks are able to contribute to the rise of new representative spaces and minimize problems of political under-representation. According to Serradourada and Rincon (2013), the Internet is related to the democratic processes by enabling the electronic vote; by spreading and exchanging information between individuals, groups and institutions; and presenting demands from the social movements.

Today individuals increasingly have used the Internet and social networking as the main platform to express discontent for some economic, political and social issues. Digital social networks, therefore, have not only enabled global and real-time connection but are now also used as a political and power mechanism (Machado, 2007; Pereira, 2011; Babo, 2013).

This power comes from the capacity that the Internet gives to the individual to record, disseminate and broadcast events, ideas, values, views and experiences relating to different questions (Machado, 2007). The possibility of fast, cheap and far-reaching communication currently makes the Internet the main instrument of citizen articulation. The network has become, therefore, a public space to reinforce different kinds of demands.

Social networking also permit the connection between different movements, groups and institutions, providing stronger pressure for demands and an ongoing exchange of information on actions, strategies, events and so on (Pereira, 2011).

Pereira (2011) however stresses that the demonstrations can be more easily organized through social networking, but it will be hard to substitute them by virtual actions alone. There is therefore no substitution process but rather complementarity between the forms of protest.

Unlike the traditional communication media (press, radio and television), which occasionally are not free to criticize the ruling body, digital networks are the communication platform of demonstrations. The Internet helps create spaces for autonomous expression free from the conventional mass media constraints (Pereira, 2011; Babo, 2013).

Pereira (2011) points out that the relation between traditional communication media and the social networks is complex, ranging from attempts to "delegitimize" to collaborative actions. Moreover, while these media support and complement each other, they are also competing between themselves.

Some of the best-known social networks worth mentioning are: Twitter, Facebook, YouTube and the Blogs. Twitter was conceived to help communication through short messages of 140 characters or less. Facebook is a social network bringing together people and their friends and those they work, study and live with. The simple interacting techniques in this product and the possibilities of disseminating information, articles, photos and videos make Facebook one of the most important social networks today. All these networks mainly activated through mobile apparatus, such as Blackberry and iPhone, are cyber-activism tools incorporated in the activist's profile.

YouTube is a site that enables its users to download and share digital-format videos and is a widely used tool for the social movements. Lastly, the Blog is a personal site to record and disseminate information. Opinion-makers, for example, use the Blog as an environment to express their opinions, free from mass media corporate control (Silva, 2012).

By deploying information technologies and networking the social movements have adopted certain characteristics, such as drive, horizontality with wide-reaching effects. Machado's study (2007) combines some of the main attributes of social movements considering the new communication and information technologies, as follows:

- Horizontality and flexibility tend to be even more horizontal, flexible and connected to different micro-networks.
- Easy proliferation of demonstrations: the Internet scope allows exponential proliferation of social collectives and connections.
- Dynamism: they can be formed, achieve certain goals, cause impact, endure or disappear rapidly depending on a number of variables.
- Based on intangible aspects: the physical headquarters and material resources are no longer important.
- Widespread power of articulation and efficiency: enables articulation of simultaneous demonstrations in different places.
- Shared values: identification of the cause and solidarity now play leading roles in the formation of such movements.
- Diffuse identity of social players: diversity of identities adds potential to the forms of activism. Personal interests are diverse and often tenuous.

Despite the growth in the use of networks as mechanisms to boost social collectives, ethical and legal questions have not yet been defined by the competent authorities. So, while networks can help disseminate actions and legitimate groups, they may also permit dissemination of false information and events. Therefore, it is understood that building ethics in relations and connections through virtual networks is an issue that now deserves attention (Silva, 2012).

## **Brazilian and international cases**

This section comments on real facts that attest to the major role of social networks in the formation and actions of groups in the context of economic, political and social conflicts in different countries. The rise of these new forms of organization and articulation of networking individuals is a contemporary phenomenon and not likely to happen in such a way and scope some years earlier. The basic input of this new form of organization is information created and effectively distributed (Machado, 2007).

The information war during the invasion of Iraq by the US government was an iconic example of the new forms of action. While the US traditional communication media broadcast an interpretation favoring American intervention, independent agencies, the Arab media and "bloggers" connected in the networks gave other versions of the conflict. Information and images that normally would not reach TV viewers and newspapers rapidly spread over the network, reaching millions of people around the world. Such actions triggered a major information war about what was happening (Machado, 2007).

At the heart of this process, an organization called *MoveOn.org* emerged, which in February 2003 successfully organized the largest protect ever in New York, taking 250,000 people to the streets to demonstrate against the war (Machado, 2007).

Another curious case was the episode known as the Arab Spring (2010), calling attention by deposing three heads of State: Presidents Ben Ali, in Tunisia; Mubarak in Egypt; and in Libya, President Muammar al-Gaddafi. The press, television and radio considered social networks to be the pillars that caused the political change in those countries. Such events were experienced in two different dimensions: at the level of collective action in the public squares and streets, and at the level of virtual actions through social networking. A link is therefore found between digital and historic space (Babo, 2013; Serradourada; Rincón, 2013).

It should be emphasized that it was the first major wave of democratic protests in the aforementioned regions. Boosted by the social networking interactions (Twitter, Facebook and YouTube), the population of the countries involved in what was referred to as the Arab Spring took to the streets en masse, expressing the society's feeling of dissatisfaction and demanding structural change (Serradourada; Rincón, 2013).

In Colombia, an emblematic protest sparked by social networking was the result of the population's dissatisfaction against the actions of the guerrilla group FARC (Revolutionary Armed Forces of Colombia), in response to the numerous cases of violence and abusive activities. A page on Facebook opened by a dweller in the city of Barranquilla succeeded in enlisting 14 million people in one month alone after its creation (Serradourada; Rincón, 2013).

Although there were other earlier mobilizations in the country, this was the first known demonstration through social networking to create widespread public mobilization both at home and abroad. This fact attests to the role of the young against the indifference of citizens toward acts of violence (Serradourada; Rincón, 2013).

A Brazilian case that portrays the role of social networking in triggering public demonstrations is the *Ficha Limpa* [Clean Slate] episode in 2011. The project mobilized thousands of signatures via the Internet, especially through Twitter and Facebook, of a document against the election to public positions of candidates who had committed some irregularity during their term of office (who had their mandate revoked; had resigned to prevent disfranchisement; or were sentenced by a judge). In general, therefore, they demonstrated against electoral corruption (Serradourada; Rincón, 2013).

Through networking the movement mobilized more than 60,000 people who, in September 2011, took to the streets of Brasília in protest. This action was decisive and the Supreme Court approved the constitutionality of the *Ficha Limpa* project, making it law. This is an example therefore of an act by public initiative that became law (Serradourada; Rincón, 2013). In this sense, it can be said that part of the profile of today's activist is to master codes of the new technologies and participate in social networks.

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