

**GLOBAL BUSINESS AND TECHNOLOGY  
ASSOCIATION**

**DEVELOPING SOLUTIONS TO CONTEMPORARY  
CHALLENGES IN UNCERTAIN TIMES**



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**Editors:**

**N. Delener, Ph.D.**

**Christina Schweikert, Ph.D.**



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# **GBATA 2019 Readings Book Papers**

# HOW TO ENHANCE THE SKIN CARE BRANDS' CONSUMERS SATISFACTION AND LOYALTY: A STUDY IN KUWAIT MARKET

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## ABSTRACT

*The skin care industry is one of the most competitive and profitable sectors worldwide. Success in this field faces challenges in the changing competitive environment and needs a full understanding of different customers' requirements and behaviors whilst keeping in mind that customer satisfaction and loyalty is crucial. The aim of this research is to determine the impact of some attributes on the overall customer satisfaction with and loyalty to X skin care brand in the highly competitive market in Kuwait. A questionnaire is used targeting a sample of 250 customers purchasing skin care products in private pharmacies covering different areas throughout Kuwait. The results of the research indicate that skin care customers perceived values in addition to customer expectations are significantly contributing to customer satisfaction, while satisfaction has a strong positive effect on customer loyalty. Moreover, highly educated consumers are more loyal to the brand as they appreciate the products' perceived values.*

**Keywords:** Customer satisfaction, Customer Loyalty, Perceived Value, Customer Expectations.

## INTRODUCTION

Kuwait is a rich country with a high per capita income of about 30,000 USD. Its GDP has experienced a growth rate of more than 20% during the past few years. Kuwait is trying to position itself as the entrance gate for investment in the gulf area. The country has 9% of the world oil reserves. The public sector dominates the economy and represents three fourths of GDP. It concentrates three quarters of the country's wealth. The government is currently trying to transfer 95% of Kuwaitis who work for the government from the public sector to the private sector. As the population in Kuwait is rapidly increasing with an increasing GDP per capita, it is undergoing a transition in lifestyle and demographics as well, and it has seen rising demand supported by increasing purchasing power (Smetoolkit, 2011).

Kuwaitis enjoy buying international brands and high couture products that makes Kuwait highly dependent on foreign trade, which represents nearly 95% of the GDP. The country depends especially heavily on imports of foodstuffs, consumer goods (40% of total) and semi-finished products (38% of total), which ranks it among countries with the highest per capita import rate. Kuwait's imports total 16 billion USD. The imports have been rapidly increasing due to the country's undertaking of large projects and a high private consumption demand (Smetoolkit, 2011).

Kuwait's weather is characterized by long, hot and dry summers and short, warm and sometimes rainy winters due to the location of the country in the Sahara geographical region. Dust storms almost always occur and humidity rises during summer. This weather is a key factor influencing the growth in skin care market aiming to protect skin throughout the year (Encyclopaedia Britannica, 2019).

# OVERVIEW OF COSMETICS AND SKIN CARE MARKET IN KUWAIT

The history of cosmetics spans at least 6,000 years of human history, and almost every society on earth. In the western world, the use of cosmetics became prominent in the middle ages, typically among members of the upper classes. Cosmetics are used in every part of the world; however, it is generally believed that cosmetics as they are now known originated in the Far East (Cravens and Piercy, 2003). Cosmetics is a general term that is applied to all preparations used externally to condition and beautify the body. Skin care products is a specific category of cosmetics designed for several purposes like cleaning, coloring, softening, or protecting the skin, hair, nails, lips, or eyes (Australian Academy of Science, 2018).

Customers are increasingly becoming aware about their appearance leading to a significant increase in the global markets of cosmetics and skin care products. The rapid growth in cosmetics sales and market in Kuwait including skin care products attracts beauty and skin care companies throughout the World. The market's growth is attributed to the region's demographics, with a population of young, fashionable trendsetters with high disposable income. Due to the lack of local cosmetics and skin care manufacturers, most of companies selling such products in Kuwait are European and American (Khraim, 2011).

## CUSTOMER SATISFACTION AND LOYALTY

### Customer Satisfaction

Customer satisfaction (CS) can be defined as the customer's evaluation of a product/service in terms of whether it has met the customer's needs and expectations (Xue & Yang, 2008). It is the response that occurs when customers have pleasurable experience while evaluating a product or service (Oliver, 1997; cited by Chitty, Ward & Chua, 2007). Customer satisfaction is a cumulative construct that is influenced both by service expectations and performance perceptions in the current time period, as well as in prior time periods (Ha & Janda, 2008). Satisfied customers are more likely to repeat purchases in time, recommend others to try the source of satisfaction, and of become less receptive to the competitor's offerings (Kotler & Armstrong, 2018; Moraga, Parraga & Gonzalez, 2008).

Mittal and Kamakura (2001) argue that repurchase behavior should be linked to satisfaction. More specifically, satisfaction is found to be a necessary precursor of customer loyalty as satisfied customers tend to be loyal customers with or without the mediation of other variables. Thus it is not surprising that many models of customer retention have considered satisfaction as a key determinant in consumer decisions regarding their relationship with a given product or service (Lemon, White & Winer, 2002). As a result, customer satisfaction has a critical focus for effective marketing programs because the cost of retaining and maintaining an existing customer is less than the cost of acquiring new one (Szymanski & Henard, 2001).

The two widely employed approaches for customer satisfaction are: transaction-specific and cumulative or overall satisfaction. The transaction-specific approach defines customer satisfaction as a customer's emotional response to the most recent transactional experience with an organization, while the overall satisfaction perspective views customer satisfaction as a cumulative evaluation and impression of a firm's service performance. In turn, it may serve as a better predictor of customer loyalty (Peterson & Yang, 2004).

### Customer Loyalty

Customer loyalty is defined as the long-term commitment of customers to repurchase the same product or service at a tolerance of price. At the same time, the customers may be an advertisement by themselves to recommend the product or service they purchase to other people (Kotler & Armstrong, 2018; Xue & Yang, 2008). Scholars (Levy, Weitz & Grewal, 2013; Peterson & Yang, 2004) argued that measuring brand loyalty is extremely difficult. Thus, researchers have used both attitudinal and behavioral measures to define and assess this variable. From an attitudinal perspective, customer loyalty is viewed as the desire to continue a relationship with a provider. While

from a behavioral view, customer loyalty is defined as the repeated purchase of the same product /service in a specific category (Chitty, Ward & Chua, 2007).

The dilemma lies in the fact that intention may not lead to action, and repeated buying behavior actually may not be a real reflect of intentions. Customer loyalty is a major driver of success in business (Levy, Weitz & Grewal, 2013; Reichheld & Scheffer, 2000). Loyal customers are less sensitive to price, may forgive mistakes, and spread positive word-of-mouth about the business to others. They require less time and attention from their preferable firms and, over time, they bring in substantial revenues. As a result, customer loyalty can be a major source of sustained growth and profit and it is considered as a strong asset (Levy, Weitz & Grewal, 2013; Anderson & Mittal, 2000).

## **European Customer Satisfaction Index**

The European customer satisfaction index (ECSI) is a well-established tool for assessing customer satisfaction and its related constructs (Vilares & Coelho, 2004). It was developed by European Organization for Quality and the European Foundation for Quality Management, and it was first introduced in 1999 (Eklof & Westlund, 2002). ECSIs were built upon a cumulative view of satisfaction. The model is based on the assumptions that customer satisfaction is influenced by some determinants such as perceived quality (PQ), perceived value (PV), customer expectations, and image of the firm that is in its turn expected to have a direct effect on customer expectations, satisfaction and loyalty (Zaim, Turkyilmaz, Ucar, & Akkas, 2010; Chitty, Ward & Chua, 2007).

Ball, Coelho and Machas (2004) added two new constructs to the model aiming for better explanation of customer loyalty, which are trust and communication. The authors explain that trust is a critical variable in determining loyalty, because customers who don't trust their provider in a competitive market place are unlikely to be loyal. Also communication is argued to affect all aspects of the customer-provider relationship. This means that loyalty is interlinked to a number of factors which strengthen the overall relationship and affect loyalty either in positive or negative way. Firms can focus on investments on those variables and setting standards to differentiate from competitors and to tie buyers to sellers.

## **DETERMINANTS OF CUSTOMER SATISFACTION**

### **Customer Expectations**

Knowing what customers expect is the first and most critical step in the whole service, because being wrong with what customers expect may cause losing the customers or expending money and time that don't count to them. Xue and Yang (2008) defined expectations as the results of prior experience with the company's products. This construct evaluates customer expectations for product/service quality, for overall quality, and for fulfillment of personal needs. According to the American Customer Satisfaction Index (ACSI) Methodology (2019), customer expectations represent both prior consumption experience, which includes some non-experiential information, and a forecast of the company's ability to deliver quality in the future. Some researchers (Turkyilmaz & Ozkan, 2010; Komulainen, Mainela & Tahtinen 2007; Zeithaml & Bitner, 2000; Cronin, Brady & Hult, 2000; Chen & Dubinsky, 2003) provided strong arguments that, performance measures may only have reasonable predictive value, while expectation measures provide key diagnostic information. Those expectations will greatly influence consumers' evaluation of quality and their satisfaction during consumption and post-consumption of product/service. Therefore, there is a need to measure and evaluate these expectations especially at the pre-consumption stage.

According to the American Customer Satisfaction Index (ACSI) and the European Customer Satisfaction Index (ECSI), it is assumed that customer expectations have a direct effect on perceived value, and a direct positive relationship with customer satisfaction (Turkyilmaz & Ozkan, 2010). When the product/service actual performance meets customer expectations he/she will be highly satisfied. On the other hand, when the customer is over promised and his expectations go beyond the actual performance that can be delivered, he will be unsatisfied and lose the trust with the product and/or provider (Agnihotri, Rapp & Trainor, 2009).

## Perceived Value

Perceived value (PV) represents the trade-off between the quality and benefits which the customer receives, and the monetary payments and non-monetary costs such as energy, time and stress that the customer incurs by evaluating, obtaining and using a product (Komulainen, Mainela & Tahtinen, 2007). Zeithaml and Bitner (2000) have suggested that PV is the consumer's overall assessment of the product consumption based on perceptions of what is received and what is given, considering some important intangible constructs.

Perceived customer value is likely to be used as an indicator of purchase intention, as it has long been recognized in marketing researches an important concept in influencing preference, satisfaction, loyalty, and other important outcomes as it reflects customers' net gain from their consumption behavior (Cronin, Brady & Hult, 2000, Chen & Dubinsky, 2003). This is supported by the means-end chain theory which explains that personal values guide people's evaluations of relevant attributes and the benefits of a product or service, and then these evaluations affect the purchase behavior (Koo, 2006).

As explained by Woodall (2009), product's attributes are linked to its functional consequence, to the psychosocial (or emotional) consequence, to the underlying personal value. The means-end approach provides a proven method for researchers to uncover underlying motives for the decision processes where respondents are encouraged to describe why something is important to them. The result is powerful communications that link the attractive features to the customers' feelings and move consumers to action and build brand loyalty. Therefore, when customers have high perceived value, they have positive evaluations of and emotions for the product.

Tsai, Huang and Jaw (2006) argue that customer perceived value has a significant positive effect on customer satisfaction and customer loyalty. The drivers of customer satisfaction include perceived value that is considered as a direct driver for customer satisfaction in addition to the perceived service quality which is viewed as consisting of two primary dimensions: core quality (basic service promised), and relational quality (the way the service is delivered). Customers may be satisfied with "what" was delivered (the core) and "how" it was delivered (the relational) but may not have felt they got their "money's worth". Decisions designed to improve customer satisfaction will be more effective by establishing the role of perceived value (McDougall & Levesque, 2000).

## RESEARCH PURPOSE AND THEORETICAL APPROACH

This study is mainly based on a combination of correlational and explanatory approaches. Correlational since it is exploring relationships between variables using statistical analysis of data collected from a questionnaire that was distributed to customers in private pharmacies. And it is also considered as explanatory, because the objective of this study is to identify the main antecedents which influence customer satisfaction and loyalty in the skin care sector, and to show the relationship between the research variables. Moreover, this study is attempting to determine the factors which influence customer satisfaction and the resultant loyalty, it is essentially a causal relationship between variables. Hence, a deductive approach is selected.

## Research Methodology

Based on the research purpose and research questions, a quantitative research approach was adopted, as the current study attempts to explain the relationship between independent variables (perceived value and expectations) and dependent variables that are customer satisfaction and loyalty.

A specifically designed questionnaire is used to investigate customers' satisfaction and loyalty toward a selected skin care brand. The questionnaire consists of three sections. Section one is for general information about the respondent such as gender, age, nationality, level of education, income per month and the duration they have been used the products/services offered by the brand targeted by the questionnaire. The second section was designed to measure respondents' satisfaction (Adapted from Chang & Wang, 2010; Peterson & Jeong, 2010; Agnihotri, Rapp & Trainor, 2009) and loyalty (Adapted from Xue & Yang, 2008; Chitty, Ward & Chua, 2007; Yang &



Peterson, 2004), and to evaluate the influence of consumers' perceived value (Adapted from Tsai, Huang and Jaw, 2006; Cronin, Brady & Hult, 2000) on their satisfaction and loyalty.

The questionnaire was then translated into Arabic from the original English using back to back translation from English to Arabic then from Arabic to English before it was distributed to the target population in pharmacies as both languages are widely used. The measurement scale employed in the questionnaire is a five-point Likert-type scale in which respondent response ranges vary, where (1) = strongly disagree to (5) = strongly agree with each statement.

In this research the target population was adults aged above 18 years who purchase skin care products. The sample was distributed randomly in 10 private pharmacies in Kuwait. Agreements with pharmacies managers were sit previously. The areas covered included Salmiya, Sabah Al Salem, 10<sup>th</sup> Area, Dasma, Khaldiya and Jabriya. In order to collect an adequate sample size to reach accurate finding and to make sure that different categories of customers were covered by the survey, 300 questionnaires were distributed, 250 returned and 234 were deemed valid for statistical purposes.

## Research Hypotheses

To reach the objectives of the research, the following hypotheses were formulated for testing this study:

**H1:** Customer satisfaction is influenced by product's perceived value and customer's expectations.

**H2:** Customer loyalty is influenced by perceived value and satisfaction.

**H3:** There are significant statistical differences between genders when perceiving value, satisfaction and loyalty.

**H4:** There are significant statistical differences between age groups when perceiving value, satisfaction and loyalty.

**H5:** There are significant statistical differences between nationalities when perceiving value, satisfaction and loyalty.

**H6:** There are significant statistical differences between levels of education when perceiving value, satisfaction and loyalty.

**H7:** There are significant statistical differences between customers' income when perceiving value, satisfaction and loyalty.

## DATA ANALYSIS

This research deploys several quantitative and statistical analyses to analyze the data, including descriptive analysis, factor analysis and reliability analysis, cross-tabulation tests between the customers' demographics and their perceptions of satisfaction, correlation analysis and regression analysis and finally studying the differences between the customers' demographics in their satisfaction and loyalty to the brand.

### Factor Analysis

Factor analysis is conducted to detect the redundancy in data, explore the underlying constructs among the variables under investigation, and examine the adequacy of the sample to measure the customers' satisfaction and loyalty towards ABC skin care brand. The factor analysis outlined in table 1.1 shows factor loading values greater than 0.3 which are considered as sufficient evidence that the data is not redundant. KMO and Bartlett's Test Kaiser-Meyer-Olkin is another coefficient used to investigate the adequacy of the collected sample to measure customers' satisfaction and loyalty towards ABC skin care brand. The KMO and Bartlett's Test Kaiser-Meyer-Olkin coefficient should be greater than .5 as an evidence of sample adequacy. From the same table, we confirm that the data is not redundant (All factor loading values were greater than 0.3) and confirm the adequacy of the collected sample (All the values of KMO and Bartlett's Test Kaiser-Meyer-Olkin are greater than 0.5).

**Table 1.1: Factor Analysis.**

Variable	Factor Loading	KMO and Bartlett's Test Kaiser-Meyer-Olkin Measure of Sampling Adequacy.
Perceived Value		
Perceived Value1	.870	0.708
Perceived Value2	.833	
Perceived Value3	.843	
Customer Satisfaction		
Customer Satisfaction1	.869	0.800
Customer Satisfaction2	.825	
Customer Satisfaction3	.773	
Customer Satisfaction4	.722	
Customer Satisfaction5	.701	
Customer Satisfaction6	.884	
Customer Satisfaction7	.672	
Customer Satisfaction8	.628	
Customer Satisfaction9	.723	
Customer Loyalty		
Customer Loyalty1	.889	0.739
Customer Loyalty2	.877	
Customer Loyalty3	.868	
Customer Loyalty4	.403	

## Reliability Analysis

Reliability analysis calculates the correlation among each group of items that are intended to measure a given variable. Cronbach's Alpha coefficient computes the scores recorded at the 5-point Likert scale of each group of items to measure the internal consistency among these items. Cronbach's Alpha coefficient under 0.7 is considered inadequate evidence of the reliability of the items set to measure the associate variable. Table 2.1 summarizes the variables under investigation and lists the number of statements assigned to measure each variable and the computed Cronbach's Alpha coefficient based on the respondents' answers. All the Cronbach's Alpha coefficients were greater than 0.7 which is considered an adequate evidence to conclude the reliability of the questionnaire as a data collection instrument.

**Table 2.1: Reliability Analysis.**

Variables	No of Statements	Cronbach's Alpha
Perceived Value	3	0.804
Customer Satisfaction	9	0.708
Customer Loyalty	4	0.742
Overall Reliability	58	0.751

## Multiple Regression Analysis

The first regression analysis considers customer's satisfaction as the dependent variable, while the independent variables are: customers' perceived value and Expectations. The regression model summary illustrated in Table 3.1 shows that R-Square = 0.524 which means that the independent variables can predict 52.4% of the variance leading to customer's satisfaction (the dependent variable). Table 3.2 illustrates the analysis of variance of the above regression model. This table confirms the significance of the regression model (Sig. = 0.000 < 0.05) and confirms that the independent variables (perceived quality, expectations) can significantly predict the outcome of the dependent variable (customer satisfaction). Based on these findings, **hypothesis 1 is supported.**

**Table 3.1: Model Summary – H1.**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724 <sup>a</sup>	.524	.501	.38499

a. Predictors: (Constant), Perceived Value, Expectations

**Table 3.2: ANOVA – H1**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	36.258	11	3.296	22.239	.000 <sup>a</sup>
Residual	32.904	222	.148		
Total	69.162	233			

a. Predictors: (Constant), Perceived Value, Expectations

b. Dependent Variable: Customer Satisfaction

Additionally, the regression model summary illustrated in Table 3.3 was conducted to test hypotheses 2. In this model, customer's loyalty is the dependent variable, while the independent variables are: perceived value and customer satisfaction. R-Square = 0.6491 which means that the independent variables can predict 64.1% of the variance leading to customer's loyalty (the dependent variable). Table 3.4 illustrates the analysis of variance of the above regression model. This table confirms the significance of the regression model (Sig. = 0.000 < 0.05) and confirms that the independent variables (perceived value and customer satisfaction) can significantly predict the outcome of the dependent variable (Customer Loyalty). For that reason, **hypothesis 2 is supported**.

**Table 3.3: Model Summary – H2.**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.801 <sup>a</sup>	.641	.628	.36394

a. Predictors: (Constant), Customer Satisfaction, Perceived Value

**Table 3.4: ANOVA<sup>b</sup> – H4.**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	53.258	8	6.657	50.260	.000 <sup>a</sup>
Residual	29.802	225	.132		
Total	83.060	233			

a. Predictors: (Constant), Customer Satisfaction, Perceived Value

b. Dependent Variable: Customer Loyalty

## Cross-Tabulation Analysis

It is very important to investigate the customers' satisfaction across the respondents who have different gender, age, education, income and length of usage of the selected skin care brand. This can help us to set several marketing practices such as segmenting and targeting customers according to their demographics and their satisfaction level with brand under investigation.

Table 4.1 illustrates the cross-tabulation between customers' gender and their level of satisfaction with the selected skin care brand. The 5-point Likert scale was restructured into 3 categories scale (Low, Medium & High). Female customers were observed to have higher satisfaction with the brand (32.8%) than male customers (15.2%). From the same table, we also notice that male customers have lower satisfaction with the brand (27.3%) than the female customers (21.9%). The results showed that the differences between male and female customers are insignificant regarding their satisfaction with X skin care brand which **confirms hypothesis 3**.

**Table 4.1: Customer Satisfaction \* Gender Cross-tabulation.**

			Gender		Total
			Male	Female	
Customer Satisfaction	Low	Count	9	44	53
		% within Gender	27.3%	21.9%	22.6%
	Medium	Count	19	91	110
		% within Gender	57.6%	45.3%	47.0%
	High	Count	5	66	71
		% within Gender	15.2%	32.8%	30.3%
Total	Count	33	201	234	
	% within Gender	100.0%	100.0%	100.0%	

**Table 4.2: Customer Satisfaction \* Age Group Cross tabulation.**

			Age Group			Total
			18-29	30-39	40+	
Customer Satisfaction	Low	Count	15	27	11	53
		% within Age Group	22.1%	25.0%	19.0%	22.6%
	Medium	Count	27	53	30	110
		% within Age Group	39.7%	49.1%	51.7%	47.0%
	High	Count	26	28	17	71
		% within Age Group	38.2%	25.9%	29.3%	30.3%
Total	Count	68	108	58	234	
	% within Age Group	100.0%	100.0%	100.0%	100.0%	

The results in table 4.2 shows that customers between 18 and 29 years old have the highest satisfaction with the brand (38.2%). It is also noticed that customers between 30 and 39 years old have the lowest satisfaction with the brand (25%). The differences between customers who differ in age groups were found insignificant in regards to their satisfaction with X skin care brand. Therefore, **hypothesis 4 is rejected**.

**Table 4.3: Customer Satisfaction \* Nationality Cross-tabulation.**

			Nationality		Total
			Kuwaiti	Non-Kuwaiti	
Customer Satisfaction	Low	Count	39	14	53
		% within Nationality	25.7%	17.1%	22.6%
	Medium	Count	77	33	110
		% within Nationality	50.7%	40.2%	47.0%
	High	Count	36	35	71
		% within Nationality	23.7%	42.7%	30.3%
Total	Count	152	82	234	
	% within Nationality	100.0%	100.0%	100.0%	

**Table 4.4: Chi-Square Tests (Customer Satisfaction \* Nationality).**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.298 <sup>a</sup>	2	.010
Likelihood Ratio	9.126	2	.010
Linear-by-Linear Association	7.701	1	.006
N of Valid Cases	234		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 18.57.

In table 4.3, it is observed that Non-Kuwaiti customers have higher satisfaction with the brand (42.7%) than Kuwaiti Customers (23.7%). The Kuwaiti customers have lower satisfaction with the brand (25.7%) than Non-Kuwaiti customers (17.1%). While in Table 4.4 that irradiates the statistical significance of the cross-tabulation between customers' nationalities and their satisfaction level, the Pearson Chi-Square value = 0.010 which is less than the significance level of 0.05 and means that the differences between Kuwaiti and Non-Kuwaiti customers are significant regarding their satisfaction with X skin care brand. Then, the results of table 4.3 and 4.4 **confirm hypothesis 5**.

The cross-tabulation between customers' education and their level of satisfaction with X skin care brand was presented in Table 4.5, where it is found that 33% of graduate and postgraduate customers have high satisfaction with the brand against 23% of customers with Diploma or less. It is also found that 23% of graduate and postgraduate customers have low satisfaction with brand against 22% of customers with diploma or less. The results showed that the differences between customers with different education level are insignificant regarding their satisfaction with X skin care brand that leads to the **rejection of hypothesis 6**.

**Table 4.5: Customer Satisfaction \* Education Cross-tabulation.**

			Education		Total
			Diploma or less	Graduate and Postgraduate	
Customer Satisfaction	Low	Count	13	40	53
		% within Education	21.7%	23.0%	22.6%
	Medium	Count	33	77	110
		% within Education	55.0%	44.3%	47.0%
	High	Count	14	57	71
		% within Education	23.3%	32.8%	30.3%
Total		Count	60	174	234
		% within Education	100.0%	100.0%	100.0%

Customers' income and their level of satisfaction with X skin care brand cross-tabulation is displayed in table 4.6, where most of the customers are noticed to show almost similar percentage of high satisfaction with the brand. Customers who receive monthly income between KD 400 and KD 700 have slightly higher satisfaction with the brand (34.3%) than the other customers. Moreover, customers who get monthly income greater than KD 1000 had the lowest satisfaction with the brand. The results showed that the differences between customers who differ in income are insignificant regarding their satisfaction with X skin care brand, which, therefore, **reject hypothesis 7**.

**Table 4.6: Customer Satisfaction \* Monthly Income Cross-tabulation.**

			Monthly Income				Total
			Less than K.D 400	K.D 400- K.D 700	K.D 701- K.D 1000	> K.D 1000	
Customer Satisfaction	Low	Count	7	16	14	16	53
		% within Monthly Income	15.2%	23.9%	17.5%	39.0%	22.6%
	Medium	Count	27	28	40	15	110
		% within Monthly Income	58.7%	41.8%	50.0%	36.6%	47.0%
	High	Count	12	23	26	10	71
		% within Monthly Income	26.1%	34.3%	32.5%	24.4%	30.3%
Total		Count	46	67	80	41	234
		% within Monthly Income	100.0%	100.0%	100.0%	100.0%	100.0%

## CONCLUSION & DISCUSSION

Organizations in different sectors are nowadays paying more attention to issues that affect their success and profitability like customer satisfaction and loyalty, and trying to define their determinants. Many studies have been conducted in customer satisfaction and loyalty, but there were few studies interested in the field of skin care in comparison with other fields.

The skin care brand tested in this study is available only in pharmacies and sold as pharmaceutical products for skin problems treatment, and some products are prescribed by dermatologists and sometimes other speciality physicians. Due to the lack of researches in this context, this study aimed to examine the effect of consumers' demographics and products perceived value on customer satisfaction and loyalty. Therefore, data was randomly collected from a sample of 250 respondents, from which 234 were found to be valid. In assessing the analyzed data, the results of factor analysis revealed that all the examined variables are reliable. In addition, the questionnaire was a reliable data collection instrument.

A review of the reached data and the analysis provides a better understanding of customer satisfaction and loyalty to skin care brands in Kuwait. By applying regression analysis technique, the findings showed that perceived value has a significant influence on customer satisfaction and loyalty. This finding aligns with the argument that customer perceived value has a significant positive effect on customer satisfaction and customer loyalty (Tsai, Huang & Jaw, 2006; McDougall & Levesque, 2000). Similarly, customer expectations are found to significantly influence on customer satisfaction and loyalty. Overall, the results of regression analysis indicated that customer's expectations are more important than the perceived value as determinants of customer satisfaction with the selected skin care brand.

Regarding customer loyalty, the findings indicate that customer satisfaction has the greatest influence on customer loyalty which confirms Mittal and Kamakura's (2001) argument that is satisfaction is a necessary precursor of customer loyalty. In addition, the results are compatible with the ECSI (European Customer Satisfaction Index) model that considers satisfaction as a key determinant in customers' decisions regarding their relationship with a given product or service. Besides, T-Test and ANOVA analysis were conducted to examine the effect of demographic variables on satisfaction and loyalty toward X skin care brand. The results show the following:

- T-Test for gender indicates that there are no significant differences in how customers perceive their satisfaction and loyalty.
- T-Test for nationality indicates that there are significant differences in how customers perceive their satisfaction, but not loyalty.

- T-Test for level of education shows that there are significant differences in how customers perceive their loyalty, but not satisfaction.
- ANOVA analysis for age group reveals that there are no significant differences in how customers perceive their satisfaction and loyalty.
- ANOVA analysis for income shows that there are no significant differences in how customers perceive their satisfaction and loyalty.

This is logical as customers with higher level of education show higher levels of interests in product's values during the purchasing decision process, and they more aware and able to understand and appreciate the offered services.

Above and beyond, Kuwaiti customers are forming 65% of customers purchasing X skin care brand products, but they have significant lower levels of satisfaction and loyalty than non-Kuwaitis. Kuwaitis have higher purchasing power and higher interest in purchasing skin care products than Non-Kuwaiti customers, so it is important to look for the reasons behind that. This can be explained by the fact that Kuwaitis are greatly attached to elegance and spend generously on fashion. Skin care products are part of that fashion that attracts customers to try new products launched in the market. On the other hand, customers who are consulting dermatologists to treat their skin problems ask for the doctor's advice before trying any new product, and because this brand is new in the market, it is still not well known to doctors who are prescribing such products.

Furthermore, 46% of customers are between 30-39 years old and they are showing the lowest level of satisfaction (25%). In order to find the reasons behind these extreme results, we had a review on the brand's products and it is found that the brand lacks the latest breakthrough in anti-aging products which are the most interesting and attracting products to this category of customers. In addition, customers confirmed that they prefer clinical procedures that provide prompt visible effects like fillers and Botox injections which are vastly applied in dermatology clinics.

## SUGGESTION FOR FUTURE RESEARCH

- A separate study could take place to analyze the variables that showed insignificant effects, aiming to understand the incompatibility of the results with what were argued by literatures.
- A study could focus on the employees' "brand advisors" point of view regarding customer satisfaction and loyalty, because they are the ones who are in direct contact with customers and receiving their comments and requests.
- It would be interesting to conduct a comparative study with other brands in the market in terms of customer satisfaction and evaluation.

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# **LUXURY CONSUMPTION UNDER LIQUID MODERNITY: DOES RELIGIOSITY LEVELS IN ISLAMIC MARKET AFFECT CONSUMERS INTENTIONS TO PURCHASE LUXURY BRANDS? STUDY IN KUWAIT LUXURY MARKET**

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## **ABSTRACT**

*In the continuously rapidly changing global market that is noticed to significantly affect consumers' consumption and brand loyalty, luxury producers and marketers need to determine luxury dimensions that consumers value the most and the impact of cultural values and dimensions on luxury consumers' behavior. Arab Islamic market is selected to be the context of this study as it is viewed as a profitable market for luxury brands expansion, in which consumers are influenced by market globalization. A pilot-test is conducted on a sample of 20 luxury consumers to verify the validity and reliability of the designed questionnaire and to ensure the understanding of the targeted sample to the questions. The results show that consumers in Kuwait market like to show-off, feel special and different. In fact, such an attitude is enhanced by liquid market globalization which makes the ownership of luxury products easier and faster.*

**Keywords:** Luxury Consumption, Globalization, Religiosity level, Materialism.

## **PURPOSE & BACKGROUND**

In the continuously rapidly changing global market that is noticed to significantly affect consumers' consumption and brand loyalty, including luxury industry, luxury producers and marketers need to determine luxury dimensions that consumers value the most and the impact level of cultural values and dimensions on luxury consumers' behavior. Arab Islamic market is selected to be the context of this study as it is viewed as a profitable market for luxury brands expansion, in which consumers have the purchasing power, highly attracted to international brands and significantly influenced by market globalization (Al-Hyari et al., 2011; Riquelme et al., 2011; Nwankwo et al., 2014; Al-Mutawa et al., 2015; Farah & Fawaz, 2016; Abalkhail, 2018).

Founded by the suggested increase in consumer's attachment to brands/products that provide access to liquid consumers (Bardhi & Eckhardt, 2017), and the observed increase of Muslims consumers, including the middle classes, spending on luxury goods that is not supposed to be consistent with the Islamic teaching that motivates its follower to adopt simple lifestyles and maintain strong enduring societal relationships (Saheeh International, 2012), the current study objectives are to measure the relationship between liquidity that is enhanced by globalization and consumers' luxury purchasing intentions, the extended-self, materialism, religiosity level and customers' demographics.

## **Contribution & Value**

This research is ordinary helping to understand the observed high turnover of luxury consumers and their tendency to switch between luxury brands, despite their increasing purchasing intentions. This attitude can be justified by the assumption that liquid style consumers are 'focused on creating temporary bonds, rather than creating lasting bonds serving identity purposes' (Bardhi & Eckhardt, 2017, p.27). Therefore, there is a necessity to understand the nature of identities of luxury shoppers in the liquid modern market dominated by digital technologies and virtual societies

(Papacharissi, 2010, p. 317), in addition to the factors they value the most while consuming luxury goods and services, especially in the Islamic context where cultural and societal factors are expected to be still valuable.

The research domain is the meeting area between the Theory of Leisure Class (Veblen, 1899), Theory of Consumer Demand (Leibenstein, 1950), The Self-Expansion Theory (Arnon et al., 2005), and the Liquid Modernity Concept (Bauman, 2000). The context is the luxury consumption in Islamic market, specifically in the Arab region, measuring their perceived values of luxury and the influence of their religiosity level on their consumption of luxury brands in the liquid global market.

## METHODOLOGY

In order to achieve the research objectives, it is decided to use a quantitative, deductive, positivistic attitude in which relationships are perceived between variables and hypothesis-driven from the literature analysis are to be confirmed or rejected based on statistical analysis of collected data. The designed research questionnaire is adapted from previous studies (Richins, 2004; Janssen et al., 2008; Worthington et al., 2003; Farah & Fawaz, 2016) including 60 items reflecting the various constructs under study that will be measured by a 5-point Likert numeric scale for all the questions. Two versions of the questionnaire will be distributed; English and Arabic, as Arabic is the national spoken language in Kuwait.

The first section of the questionnaire comprises four demographic questions related to age, gender, education level, nationality, and religion, some of which are expected to cause differences in consumers' behavior toward luxury. The second section measures consumers' religiosity level, which is determined to be one of the research moderating factors. Religiosity is measured by using items adapted from the Religious Commitment Inventory (Worthington et al., 2003) that has been shown to have high internal consistency across religiously diverse groups including Muslims (Worthington et al., 2003; Mokhlis, 2006; Mokhlis, 2009) and has been validated across different samples. The RCI-10 scale measures cognitive and behavioral commitment to a religious value system by selecting how true is each of the following statements for the respondent. □

A third section is designed to obtain deeper insights into how personal, social, cultural and global values influence consumers' decisions to purchase luxury brands in the Islamic market, specifically in the Arab region. This part is adopted based on several studies conducted previously with few adjustments to suit this research. The constructs consist of luxury values and dimensions including self-identity, perfectionism, hedonism, conspicuousness, uniqueness, social status and normative influences that are adopted from Farah and Fawaz's (2016) work who agreed on the reliability of Monkhouse et al. (2012) measurements of luxury values. While other dimensions are adopted from other sources; Informative influences measurements were derived from definitions provided in the literature by Park and Lessig (1977), Bearden et al. (1989), Murali et al. (2005), Pincus and Waters (1977), Argo et al. (2005) and Bearden et al. (1989), whereas materialism measurement dimensions are comprised of Richins's (2004) work. And measures of luxury purchasing intentions are the approved work of Janssen et al. (2008) that was adopted and conducted by Kassim and Zain (2016).

The mediating effect of brand prominence is measured by an exertion developed from Richins's (2004) and Han's et al. (2010), while measurements of the moderating effect of globalization are established from the characteristics of the liquid consumption phenomenon (Bardhi & Eckhardt, 2017) that is derived from the Liquid modernity concept (Bauman, 2000). The suggested measures embrace the key criteria of the contemporary global market discussed in the literature review (Chapter 5) that are described as short-living consumer value, dematerialization (Bardhi & Eckhardt, 2017), shopping addiction, shopping risk reduction, compulsive shopping, liquid intrinsic identities, free shopping of intrinsic identities and liquid attachments to and relationships with objects and brands (Bauman, 2000).

## PRELIMINARY FINDINGS

A pilot-test is conducted on a sample of 20 luxury consumers to verify the validity and reliability of the designed questionnaire and to ensure the understanding of the targeted sample to the questions. The selected respondents are actual luxury consumers who are expected to provide more valid precise results.

The results of the collected data show that the majority of the consumers were Arab residents, Muslims, above the age of 35, females and hold degrees above bachelor. The highest purchasing intention was for luxury shoes and bags, followed by vacations abroad, cars and vehicles, and makeup and perfumery and watches. The forth attractive category was luxury dining out, while the lowest was for luxury jewelry. Moreover, the descriptive analyses illustrate that Kuwaiti consumers were the most interested in purchasing luxury clothing, dining out, vacations abroad, cars or vehicles and watches. Non-Arab residents were mostly interested in luxury shoes and bags, makeups and perfumery, and jewelry. In terms of religion, luxury dining out, vacations abroad, and cars and vehicles are found to be more attractive for Muslim consumers. However, Non-Muslims were more attracted to luxury clothing, shoes, and bags, makeup and perfumery, watches and jewelry. In regards to consumers age category, consumers who are above 35 demonstrated the highest intentions to luxury dining out, vacations abroad, cars and vehicles, shoes and bags, and jewelry. On the other hand, consumers between 18-23 were the most interested in luxury clothing, makeup, and perfumery, while consumers between 18-23 and 24-29 were the most attracted to luxury watches. Measuring the influence of gender on luxury purchasing intentions clarifies that males are unexpectedly more interested than females in all luxury categories. Males and females showed close interests in luxury clothing. Education level was also noticed to affect intentions toward luxury products. For instance, diploma degree holders are more interested in luxury clothing, watches, makeup, and perfumery. Bachelor degree holders were the most interested in luxury cars and vehicles, and luxury makeup and perfumery products. Differently, Individuals who hold degrees above bachelor were the most attracted to luxury dining out and vacations abroad.

Analysis of the dimensions and factors that have high influences on luxury consumers purchasing intentions illustrated that globalization has the highest impact, followed by conspicuousness and social status, while the lowest impact was for uniqueness. Furthermore, Consumers are found to be more affected by informative influences than the normative, meaning that they pay more attention to what others say and do rather than following cultural norms and values. Additionally, luxury purchasing intentions were negatively related to consumers' religiosity level, but the correlation is insignificant. Finally, materialistic consumers focus on specific luxury values that are brand prominence, perfectionism, uniqueness, and hedonism which is a logical preference for materialistic individuals. But the new fact is that they are also valuing the enjoyment and happiness associated with owning luxury brands.

In order to understand the differences between consumer groups and to measure the influence of consumers' demographics on their perceptions of luxury values, ANOVA analysis was conducted. The results exhibit no differences between males and females in the levels of religiosity, intentions to luxury purchasing, evaluation of different luxury dimensions and the influence by globalization, while variations were found between education level categories. Customers holding degrees above bachelor were the least religious, and the least influenced by uniqueness, reference groups and brand prominence, while bachelor degree holders are the most perfectionists, hedonistic, materialistic consumers, who look forward to being unique through the consumption of premium-priced products, and also they are influenced by others opinions about what they purchase. On the other hand, bachelor degree holders were the least brand prominence and luxury purchasing oriented. Despite the mentioned deviations, the differences were found insignificant. □

Besides, differences between age categories are found to be insignificant in terms of religiosity, perceived luxury values and influence by liquid market globalization. This means that all luxury consumers of different ages appreciate the multi-valuable luxury products although they may differ in the luxury products category they are interested in. Finally, the analysis results illustrate that consumers' nationalities have a significant impact on the perceived hedonistic and conspicuousness values of luxury purchases. Both Arabs and non-Arab residents were more conspicuous and hedonistic than Kuwaiti consumers, meaning that the consumption of expensive luxury products and services give a sense of fulfillment and enjoyment.

## CONCLUSIONS AND MANAGERIAL IMPLICATIONS

Luxury products and services marketers in the Islamic Arab Market have to focus on luxury dimensions that consumers highly appreciate like conspicuousness and uniqueness, which mean that consumers in Kuwait market like to show-off, feel special and different. In fact, such an attitude is enhanced by liquid market globalization which makes the ownership of luxury products easier and faster. It is also noticed from the sample that Kuwait market consumers are religious, yet, this does not suppress their attraction to luxury items. This is justified by their appreciation to the pleasure and gratification they feel while purchasing such products.

Furthermore, luxury brands managers must stress on the availability of products information on the internet via websites and social media, in addition to educating customers in the know-how as they are considered as important resources of information for other customers. Finally, the results highlighted that consumers' intentions to luxury vary according to their demographics. Therefore, luxury marketing managers have to carefully define their targeted segments in order to achieve higher sales and profits.

To conclude, luxury brands managers who are targeting Kuwait market consumers have to design their marketing activities, including advertisements, public relations, and in-store personal selling to attract mature highly-educated adults who want to feel special and different than others and would like to show their social status. Furthermore, Luxury brands websites and stores must focus on providing detailed products information which their consumers who like to show-off and to feel special can share with others, that consequently will result in attracting more customers affected by the normative influence. Besides, offering VIP lounges and special services can consumers' enjoyment of the shopping experience which also they will share others.

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# THE EFFECTIVENESS OF INTEGRATED MARKETING COMMUNICATIONS IN MID-SIZED RECRUITMENT ORGANISATIONS IN THE UAE

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## ABSTRACT

*In the modern business environment, forming an effective relationship with the target audience in the long term should be imperative to any business, regardless of the specific industry, its size, and the country of origin. As a consequence of the kind of direct contact that customer-focused organisations have with their target customers, they need to get to know them better by understanding their needs and expectations. Indeed, effective and influential relationships exist between organisations and their clients when trust is formed. This relationship would be interdependent in an ideal world so that organisations could create customer-focused communication and marketing messages, while developing products and services in keeping with their needs. Communication between organisations and their target audiences can be linear or one-way, emanating from the marketer to the target market. This paper aims to explore and provide some insights into the effectiveness of integrated marketing communications in mid-sized recruitment organisations in the UAE.*

**Keywords:** Marketing communication, Integrated marketing communication, Mid-sized recruitment organisation.

## INTRODUCTION AND BACKGROUND

The business discipline of marketing relates to sending key messages to markets about companies and their different brands. The notion of ‘marketing’ consists of an overall range of different marketing activities having different facets. In contrast to marketing, the concept of marketing communication relates to certain elements of the company’s marketing functions that directly deal with the communication that occurs with target customers (Baker, 2014; Parente & Strausbaugh-Hutchinson, 2014). As part of a natural evolution of marketing, customer satisfaction has driven many companies to establish closer relationships with suppliers, partners and others in the supply chain (Ozuem, O’Keeffe, & Lancaster 2015). The idea of Integrated Marketing Communication (IMC) is an important element of marketing communications. IMC is an integral concept which emerged during the late 20<sup>th</sup> century and its overall value and worth have been growing since the time of its inception (Grove, Carlson, & Dorsch, 2007; Mulhern, 2009; Shimp & Andrews, 2012; Mihart, 2012). The concept of IMC plays a pivotal role in the process of effective business management despite claims that its contribution is quite recent in nature. Across the world, an increasing number of organisations are adopting IMC to gain and maintain their competitive advantage (Kitchen & Burgmann, 2010; Naeem, Bilal, & Naz, 2013).

This paper therefore explores the overall effectiveness of the IMC process, through which business processes and performances are improved (Gurău, 2008). Schultz and Schultz (2008) contend that the development and planning of marketing programmes should take cognisance of a range of functions and activities. This influences the flow of information between organisations and stakeholders. The introduction of new technologies increases the need and demand for integration. Successful marketing in this century should have a successful communication strategy and this requires more creative thinking aligned to an integral approach to all communication activities (Kitchen & Proctor, 2002). These are the decision-making metrics that emphasise the need to transmit messages. This research is therefore relevant to a discussion of the strategic intent of the organisation. The main point is the shift from traditional activities

towards a competitive era where the focus is on a synergetic approach, as IMC represents this approach and replaces traditional marketing activities.

## **THEORETICAL CONTEXT**

Marketing and communication within organisations connect several operational departments via one channel. Increasingly, a variety of contemporary, complex and problematic issues have emerged with strong potential to affect both the comprehension and practice of professional marketing communications. Thus, these problematic issues have become major value-focused, decision-making issues. As a result, modern-day organisations have started to perceive a need for leadership in terms of IMC with the aim of incorporating areas of professional practice and an extensive array of accessible communications options (Gabrielli & Balboni, 2010; Ozuem, Howell, & Lancaster, 2008). Indeed, IMC is one major and considerable area being re-moulded and challenged by new media. The IMC approach is an improved pathway that incorporates professional decision-making across various aspects of business. Through the effective implementation of IMC, businesses can make their domains stronger and improve their performance. Integrated marketing communication is an auspicious communication approach that is more than simply the coordination, unification and integration of communication instruments: It is about strategic positioning; managerial, organisational and personnel issues; and relationships (Ozuem, 2004).

With regard to the development of the IMC concept, the idea of integration arose as an outcome of acknowledgment of disintegration in the communication field. Therefore, the concept of IMC was developed and emerged during the 1990s as an attempt to achieve consistency across the disciplines of marketing communications as well as in the field of media, which has now become fragmented as competition, individual disciplines and the development of individual objectives for communication have been refined. During the 2000s, researchers began to recognise a practical and logical need which was known as a stage for IMC to be induced across customer contacts with an organisation, and hence the overall business process of the organisation (Grove, Carlson, & Dorsch, 2007). IMC necessitates planning, coordination and consolidation to bring marketing-associated communication messages together. It is a catalyst for interactions between organisations and their employees, and between customers and suppliers who are key stakeholders. In this way, the organisation tries to shape the perceptions of its stakeholders towards the organisation and its products and services (Einwiller & Boenigk, 2012; Mapheto, Oni, & Matiza, 2014; van Reijmersdal, 2011).

A modern-day perspective associated with IMC is that due to the fast-growing demand for various categories of products and services following the Second World War, the overall focus of marketing was attuned to the product and service itself, and companies formed effective relationships with their target audiences as a consequence (Holm, 2006; Kitchen & Burgmann, 2010). Many organisations during the 1950s formulated rigorous plans for their products and services without considering the wants and needs of their customers (Peltier, Schibrowsky, & Schultz, 2003). Due to dramatic and revolutionary changes in the marketplace and in communications approaches with the passage of time, organisations have realised the importance and significance of IMC for their clients and for their profitability (Cornelissen, 2003; Jovičić, Vranješ, & Stankov, 2015). With the level of market competition increasing, and supply exceeding the market in many developed economies, a dramatic change in power towards organisations and intermediaries has occurred.

However, the modern-day customer is very aware of the marketplace and does not need to look forward to communication messages transferred by the organisation. Moreover, the contemporary customer makes informed decisions, while making demands and influencing promotional ads (communication messages). Organisations and their marketers are responsible for making appropriate and quick responses to these revolutionary changes. In doing so, they need to conceive comprehensive communication plans by also integrating their target audience as the point of departure, and then work back towards the product or service, so that the best communication strategic plans are devised. Throughout the process of strategic planning, customer information (needs, expectations, and wants) along with data on other background information needs to be obtained. This is referred to as an outside-in approach in the classification of IMC (Schultz & Schultz, 2003; Reid, 2005; Reid, Luxton, & Mavondo, 2005; Kitchen & Burgmann, 2010). A crucial and imperative outcome due to the development of IMC is that all the tools and techniques of the communication mix are incorporated, and they support one another, which leads to a large number of positive effects.



The contemporary marketing communication phenomenon presents advanced opportunities and challenges for businesses that distinguish social media as a new tool to conceive a better customer experience for developing and enhancing the brand awareness through creating and amplifying exciting word-of-mouth (Ozuem, Thomas, & Lancaster, 2016).

As far as the recruitment business is concerned, one of the keys to success for organisations is their effective communication with clients (Blakeman, 2014; Mapheto, Oni, & Matiza, 2014). With fast-growing increases in competition in recruitment organisations, it has become inevitable for small and mid-sized firms to make an effort to influence new prospective clients, while creating brand loyalty (Mapheto, Oni, & Matiza, 2014). In the contemporary business world, consumers play a pivotal role which is even more substantial. Modern-day consumers have better competencies and capabilities when it comes to choosing media and accepting or refusing marketing messages. Communications in this way are a natural process in which the organisation 'pushes' marketing and brand messages by means of a variety of media channels. Consumers, in turn, have the absolute right to refuse or 'pull' these social media and web-generated messages on their devices when they want.

By reviewing authentic arguments about the development and implementation of the IMC concept in organisations, such organisations, regardless of their sector or scale, will be able to ascertain the possibilities of IMC application. They will also determine how they can practically implement IMC. These factors begin with higher management assistance, customer-orientation, and a customer-focused approach, using communication as a sustainable competitive edge and a centralised communication system. Moreover, organisations, marketers and the different departments associated with customers will be capable of understanding how successful IMC implementation requires the proper placement of roles and responsibilities at an appropriately high level of the organisation. Clear leadership is also required (Kitchen, Kim, & Schultz, 2008). Successful implementation is linked to the culture of the organisation and the leadership stance that motivates staff. The IMC approach should be embraced and practised by everyone to yield the potential benefits of IMC.

This study may further help to understand and address the barriers to the effective adoption, development and implementation of IMC amongst top management and leaders. This is a form of top-down support which is an imperative type of cross-functional planning and involves multiple departments. Functional activities are required in the implementation of IMC, and ultimately it will result in cross-selling opportunities (Einwiller & Boenigk, 2012). It is the outcome of the requirement for strategic incorporation, which needs to happen in customer-oriented organisations (Muñoz-Leiva, Porcu, & Barrio-García, 2015). The IMC approach is more like an integrated or holistic approach where departments within organisations coordinate each aspect within their domains.

Valid arguments in this paper about IMC will assist recruiting organisations in understanding the process of developing, implementing and applying a variety of persuasive programmes of communications with valuable clients and prospects with the passage of time. Stakeholders will be able to comprehend the basic goal and objective of IMC, which is to make an influential impact on the attitudinal and behavioural patterns of selected communications audiences. Recruiting agencies, as well as other businesses, will develop awareness about the implementation of IMC because this way of communication integrates and addresses all sources of brand or company contacts which a client or prospect has with the service. The IMC process commences with clients and then works back to ascertain and describe the methods, procedures and practices by which persuasive communications programmes are established in organisations (Kitchen, Kim, & Schultz, 2008).

## **CONCLUSION AND MANAGERIAL IMPLICATIONS**

Messages can now be transferred to consumers through word-of-mouth. Therefore, when taking IMC development into consideration, the upsurge of push-pull communication and Consumer-to-Consumer (C2C) marketing communication (Podnar & Golob, 2014), and particularly C2C interactions in online communities (Leonard, 2010), cannot be overlooked. For this reason, how networks communicate between themselves and with target audiences and organisations (Opreana & Vinerean, 2015) needs to be considered. Thus, in the recruitment business context, one of the keys to success for organisations is effective communication with clients (Blakeman, 2014). In this context, business organisations and job-seekers can be understood as two separate classifications of clients. By implementing

IMC, a recruitment firm communicates with all business stakeholders efficiently and effectively. The development and application of IMC can be very effective for recruitment firms. Indeed, Information Technology has paved the way for modern-day businesses to perform better. To obtain extraordinary advantages, recruitment organisations can easily embrace a coordinated model of marketing and communication into their HR practices and in this way they can easily change and manage overall employee recruitment and selection practices more effectively (Bulganina et al., 2016). By adopting IMC and incorporating it into their HR practices, there is evidence that organisations have improved their communications (Clow & Baack, 2010). In the era of IT, it is easier for recruiters or recruitment agencies to successfully promote their services to organisations and job-seekers by encouraging them to benefit from their services.

In the modern digital business environment, online platforms link company portals to recruitment firms that have a strong potential to handle the overall hiring process effectively. Recruitment agencies are involved in all recruitment processes, and in the screening of candidates through online media. Indeed, this is one of their key responsibilities. The core advantage of this approach is that candidates do not need to travel for an interview. Recruitment agencies can save time by getting directly involved in online interviews through video conferencing.

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# BRAND SWITCHING: BACKGROUND TO CONTESTABLE CUSTOMER–BRAND RELATIONSHIPS

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## ABSTRACT

*The paper explores existing literature on brand loyalty and identity theory to examine the effects of identity on brand switching. Despite extensive studies on brand switching minimal research has been carried out to establish how market disruptions negatively impact customer–brand relationships and the strategies companies adopt to gain competitive advantage by repositioning themselves to minimise brand switching when disruptions occur in today's complex and globalised business environment. Although loyalty literature offers valuable understanding of customer–brand relationships, two limitations trigger the need for critical investigation.*

**Keywords:** Smartphone, Brand Switching, Brand Loyalty, Consumer Behaviour.

## INTRODUCTION AND BACKGROUND

Existing brand switching research covers customers' intentions to assess possible substitutes from product categories to maximise the functional utility attributes in the marketing mix (Seiders & Tigerts, 1997; Sathish et al., 2011; Jung et al., 2017; Giovanisa & Athanasopoulou, 2018). Literature in the above stream of research fails to acknowledge the impact of socio-psychological attributes besides functional utility maximisation. This paper presents insights into the phenomenon of brand switching behaviour of consumers in a competitive market, with implications for how resistance could be built from an identity theory perspective. Emphasis has historically been placed on the functional utility of products at the expense of social meanings. With exceptions of product function, insufficient attention has been paid to socio-psychological attributes and the personal and social meanings of brands (Lam et al., 2013; Sweeney & Soutar, 2001). The basic assumption underlying this paper is that people are constantly involved in social interactions and interpreting their constantly changing world. Hence, this paper deviates from the traditional economic viewpoint of dealing with brand switching as functional utility maximisation (Appiah & Ozuem, 2018), to treating brand switching as a consequence of social mobility between brand identities amongst consumers (He et al., 2012; Lam et al., 2013).

The paper explores existing literature on brand loyalty and identity theory to examine the effects of identity on brand switching. Despite extensive studies on brand switching (Ozuem & Lancaster, 2012) minimal research has been carried out to establish how market disruptions negatively impact customer–brand relationships and the strategies companies adopt to gain competitive advantage by repositioning themselves to minimise brand switching when disruptions occur in today's complex and globalised business environment. Although loyalty literature offers valuable understanding of customer–brand relationships, two limitations trigger the need for critical investigation (Lam et al., 2013):

1. Predictors of brand switching resistance include resisting both time and market disruptions. However, brand literature tends to concentrate on the performance of brands within normal market conditions with less consideration for current complexities (Keller & Lehmann, 2006) when market disruptions become more prevalent.
2. Another limitation arises when we consider the perceived value of brands when conceptualised and operationalised as functional utilitarian values. This is prevalent in brand loyalty literature, which does not

capture other non-utilitarian factors such as socio-psychological benefits that might motivate customers to continue buying (Sweeney & Soutar, 2001).

This paper builds upon loyalty literature by considering the limitations identified, to further develop a substantive theory in relation to pre-existing frameworks, e.g. Lam et al.'s (2013) consumer–brand identification (CBI) model, and examine brand switching in a specific market disruption, namely the introduction of a radically new brand due to innovation in the technology industry and specifically the Smartphone industry. This sector was selected as the product category for this paper because it represents a context in which brand switching is likely to occur due to the multiple alternatives and short inter-purchase frequencies that identify it (Jung et al., 2017). Notably, the market for Smartphones is dynamic, and the degree and rate of change in the technology and product innovation disrupting the market is staggering (Cecere et al., 2015; Ozuem, Howell & Lancaster 2019). No research has been carried out to study the phenomenon of brand switching from an identity theory perspective that utilises grounded theory methodology. Such an approach could provide useful insights and could help build a substantive theory to serve as a basis for future research. The paper could also benefit organisations from a managerial point of view, especially brand and customer relationship managers who must devise customer relationship strategies to achieve a sustainable competitive advantage (Da Silveira et al., 2013; Stokburger-Sauer et al., 2012; Lam et al., 2013).

## THEORETICAL CONTEXT

Hogan and Armstrong (2001) posit that brand switching is about replacing an incumbent resource with a more valuable one to achieve competitive advantage. Sathish et al. (2011) indicate that it is consumer behaviour where the behaviour of consumers differs based on the satisfaction level of consumers with providers. Hence, brand switching can be described as the process of being loyal to one product or service and switching due to dissatisfaction or other problems. Market disruptions have led to a phenomenon that represents the issue of the possibility of brand switching, which was the basis of the emerging theory. Indeed, the phenomenon of brand switching includes properties of commitment, behavioural loyalty and attitudinal loyalty and these properties reflect the views of users of Smartphones. In line with recent developments in choice modelling, identity theory suggests that brand switching also serves socio-psychological purposes besides functional utility maximisation (Rao et al., 2000).

### Resistance through Consumer–Brand Identification (CBI)

Hughes and Ahearne (2010) define brand identification as the degree to which a person defines his or her self by the same attributes as he or she believes define a brand. The notion of Consumer–Brand Identification (CBI) suggests that customers may have their self-definitional needs partially satisfied by brands and thus they identify with the brand (O’Keeffe, Ozuem, & Lancaster, 2016). Similarly, the more consumers identify with brands, the more likely they are to engage in brand-supportive behaviours and help other consumers satisfy specific self-definitional needs. In their conceptualisation of CBI, Lam et al. (2013) suggest that the brand serves as a relationship partner to both the ‘private self’ (i.e. such that individuals use the brand to define who they are) and the ‘social self’, such that individuals consider themselves part of an in-group identifying with the brand.

CBI is a psychological state that goes beyond just the cognitive overlap between the brand and the self; it also includes the affective and evaluative facets of psychological oneness with the brand. It can be argued that CBI is at a higher level of abstraction than the less abstract concept of self–brand congruity (Lam et al., 2013). More specifically, CBI is the customers’ psychological state of perceiving, feeling, and valuing their belongingness with a particular brand.

Thus, identification with a brand is likely to be related to the extent to which a person perceives the brand: 1) to have a personality that is similar to his or her own, 2) to be distinctive, and 3) to be prestigious. Specifically, CBI identifies the extent to which consumers: 1) feel that their interactions with a brand help them connect with important others, 2) perceive a brand in warm, emotional terms rather than cold and rational ones, and 3) have fond memories of brand consumption experiences (Yeh, Wang, & Yieh, 2016; Stokburger-Sauer et al., 2012). According to Badrinarayanan and Laverie (2011), when individuals identify with a brand they form a psychological

relationship with it, and consequently demonstrate favouritism and work to the benefit of the brand. Consumer–brand identification is positively associated with consumer–brand relationship quality. People who identify with a particular brand experience a positive psychological outcome in the form of enhanced self-esteem, and they engage in positive action strategies towards the brand (Donavan et al., 2006). Although identity and social identity theory have evolved across the fields of social psychology and sociology, both have several concepts in common and have been incorporated into self-concept marketing literature. Both examine the association between the self and society (Belk, 1988; Swimberghe et al., 2018). Most relevant to this paper are identification and identity-congruent behaviour. Identity represents the subjective component of a role and identities are organised hierarchically.

Analysis of brand identification has developed from its underpinning in social identity theory (SIT) and self-categorisation theory (SCT). These theories indicate that consumers try to attain a social identity that communicates their own identity, which assimilates to that of members within a group to which they belong (Elbedweihy et al., 2016; Appiah et al., 2019). As conceptualised in SIT, identification is defined as the psychological state that has multidimensional perspectives, namely affective, cognitive and evaluative (Lam et al., 2013). However, it has also been defined in literature as congruence of self-image among consumers and brands (Hughes & Ahearne, 2010) or the involvement of a consumer in a brand. Consumers identify with brands with which they share similar personality traits and values, given the importance of the symbolic nature of brands. Consumers create their social identity based on their brand choice (Dey et al., 2018). Identifying with a preferred brand has psychological benefits, including strengthening consumers' self-esteem (Elbedweihy et al., 2016), involving behaviours like loyalty, cross-buying, up-buying and word-of-mouth. It also implies a willingness to pay a higher price and resistance to negative information about the company.

## CONCLUSIONS AND MANAGERIAL IMPLICATIONS

This paper has made a number of contributions which lie within its theoretical and practical context. Theoretically, as indicated in the rationale, this paper identified gaps in knowledge in the brand loyalty literature. First, the brand loyalty literature focuses only on how brands perform under normal market conditions. However, this paper has provided consideration for prevalent market disruptions in a competitive market, in the context of the Smartphone industry in the UK. Secondly, the current paper confirms that the literature does not capture other non-utilitarian factors such as socio-psychological benefits. The branding literature however reveals that brands can provide self-definitional benefits beyond utilitarian benefits (e.g. Fournier, 1998; Keller, 2008; Keller & Lehmann, 2006; Appiah et al., 2019), establishing that the sustainability of brand loyalty could be accomplished from an identity theory perspective.

Managerially, this paper provides pointers for organisations, especially brand and customer relationship managers in terms of how to devise customer relationship strategies to achieve a sustainable competitive advantage. Consumers form strong relationships with those brands which they perceive to have values and personality associations that are congruent with their self-concept (Appiah & Ozuem, 2019). Consumers appear to use brand associations to assess congruence between their 'selves' and the brand. Drawing on the above this paper suggests that the consequences of implementing these identity strategies would enable brand managers or organisations to withstand disruptions in competitive markets, and lead to high brand advocacy among consumers through positive brand image and word-of-mouth. This further mitigates brand switching during market disruptions in competitive markets.

In the marketing context, the narrative analysis by Stern et al. (1998) implies that customers may switch to a brand they used to dislike by revising their view of the brand's identity and reference group. Research into cultural assimilation also reports that immigrants swap their cultural identities in consumption as they assimilate into the mainstream culture (Appiah et al., 2019), and further clarifies that as children mature into adolescents, their self-concept becomes more sophisticated and so do their connections with brands. When the boundary between the 'in-group' and the 'out-group' is impermeable and changing group membership is not realistic, social mobility is not a viable strategy to cope with identity threats. For example, people rarely change their political affiliation, as social identity theory suggests that under such circumstances people will engage in social creativity. Tajfel and Turner (1979, p. 43) posit that social creativity can take multiple forms, such as: comparing the 'in-group' with the 'out-group' based on some new dimensions and changing values assigned to the attributes of the group such that

previously negative comparisons are now cast in a positive light, and avoiding using the high-status 'out-group' as a comparative frame of reference. In other words, social creativity is a form of identity-based comparison that is based on 'in-group' biases and defined as a strong belief in the superiority of the group with which a person identifies. It is a form of prejudice against the non-identified group. Such 'in-group' biases are both cognitive and motivational because these biases motivate 'in-group' members (e.g. brand identifiers) to attend only to elements that the 'in-group' will evaluate more positively than 'out-groups'.

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# OVERCOMING EXPORT BARRIERS: MULTIPLE APPROACHES TO BUSINESS CLUSTER INTERNATIONALISATION IN DEVELOPING AND EMERGING MARKETS

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## ABSTRACT

*Colocation generates unique features, within dynamic relationships, that support internationalisation activities of clustered business. This postulations is empirically addressed through the collection and analysis of both qualitative and quantitative data from two fruit processing clusters. A comparative examination revealed that export drivers such as partnership between multinational and indigenous businesses, entrepreneurs' international exposure and the embedded relationships of local distributors and associations have paved the way for dynamic network activities in international markets. These multiple exporting approaches in the cluster are sustained by sociocultural collaborative relationships which allow small and medium scale businesses to operate internationally but maintain local peculiarity*

**Keywords:** Entrepreneurs, Knowledge, Networks, Cluster, Internationalisation.

## INTRODUCTION

The advantages clustered businesses enjoy has received extensive recognition as a policy tool for organising economic activities by governments and international development institutions (Martin and Sunley, 2003; OECD, 2007) This has led to growing studies on spatial clustering of firms in developing economies, to elucidate their common features and to propagate the cluster concept as driving economic growth in developing economies (Sonobe et al., 2011; Ibeh et al., 2012; Clark and Ramirez , 2013; Rasiah and Vainanchiarachi; 2013). Existing literature shows that external knowledge and networks serve as the means by which businesses in clusters are able to survive and remain competitive in the world market. However, very often the internationalisation knowledge and networks in emerging economies are driven by either Multinational Companies (MNC) or public institutions (Sonobe et al., 2011; Rasiah and Vainanchiarachi; 2013). Despite the growing study of clusters in developing economies, research on internationalising activities in clusters remains relatively limited and minimally draw on entrepreneurs' ability to operate in the international market.

However, advancement in technology and lowering cost of transportation, over the last three decades, has shortened the product life cycles of small businesses; making it easy for them to traverse the international market. (Piore and Sabel, 1984; Hashai and Almor, 2004; Baldwin, 2011). Small businesses are able to permeate the international market from the onset based on the ability of entrepreneurs to explore opportunities to satisfy international markets. This has extensively been espoused in the international entrepreneurship literature, albeit in developed economies (Oviatt and McDougall, 1994; Bell et al 2003; Cavusgil and Knight, 2009). Entrepreneurs in these small businesses are able to harness external knowledge quickly through business networks due to the availability of information, stable institutional environment and international exposure. As a result, businesses are able to operate, perform and remain competitive in international market (OECD, 2009; Baldwin, 2011). Despite these

developments, little is known about how entrepreneurs and small businesses in developing countries develop and take advantage of knowledge networks to explore and enhance their participation in international markets.

Considering the contrasts between entrepreneurs in developed and developing economies with respect to internationalisation, there is the need for deeper understanding with respect to how the participation of entrepreneurs in clusters could be central to the internationalisation activities in emerging or developing economies. The dynamism of emerging economies' clusters and how entrepreneurs harness their peculiarities to propel internationalisation has been largely overlooked. This paper further seeks not only to move the discussions of International Entrepreneurship away from developed economy but to explore the phenomenon within agglomeration theory in developing and emerging economies. In effect, though spatial organisation in clusters are not cast in stone, the peculiar features of the clusters and entrepreneurs' ability to harness them to facilitate internationalisation is critical to provoke a micro level discussion in developing economies.

This paper aims to fill these important gaps in the IE literature by examining two distinct exporting fruit processing business clusters in Ghana. The paper explores the features of entrepreneurs in exporting co-located businesses within a unique institutional environment different from those in developed economies (Amoako and Lyon, 2014; Ayakwah et al., 2018) by employing a mixed method approach. This is to ensure that study provides detail appreciation of the unique features of the agglomerated businesses in order to appreciate entrepreneurs' ability to utilise these features to internationalise. The paper is informed by the following research questions:

RQ1: *Does the unique key features within processing business clusters matter in generating the needed conditions for internationalisation?*

RQ2: *How has business entrepreneurs in the clusters utilise these unique key features to promote internationalisation?*

RQ3: *Is there an African perspective regarding the internationalisation activities in business clusters?*

The rest of the paper is organised as follows: Next, the literature on exporting activities in developing economies' clusters, networking and knowledge transfer among internationalising businesses are reviewed in line with the three research questions. This is followed by the discussion of the methodological approach adopted to answer the research questions. The main findings of the research are then presented and followed by a discussion of the findings and conclusion.

## KEY LITERATURE

### Internationalisation in Developing Economy clusters

The argument still remains that business activities based on export, especially in emerging and developing countries, have been promoted with the help of government initiatives through programmes and policies as well as the collaborative efforts from firms linked to transnational corporations. (Rasiah and Vinanchiarachi, 2013; Ayakwah et al., 2018). In their study of 54 SMEs internationalisation literary work across Africa, Ibeh et al (2012) observed that, with respect to their proximity, other exporting firms have a positive impact on the expansion and adoption of export programmes. Businesses are able to acquire export opportunities within the locality they operate due to the relationship with other businesses. An instance can be viewed from a study in Bangladesh where it was found that the help of export market information through trade missions, trade fairs, export workshops and seminars and overseas training programmes on product development, ensured the facilitation of internationalisation process and provided extensive knowledge in the international market (Shamsuddoha et al., 2012)

Also, cooperation among network relationships and the transfer of technology by international businesses equally support the promotion of exports within clusters in emerging and developing economies. A case in point is the automobile and salmon clusters in South Africa and Chile respectively (Alfaro et al, 2012; Perez-Aleman, 2005). Contact networks and resource-augmenting external collaborative partners were identified as important facilitating factors on SME internationalisation across Africa (Ibeh et al, 2012). Through networks and collaborations with MNC within global production chain, the automotive and electronic business clusters in Buenos and Argentina, respectively, attained more innovative ways in the production and designing of products for the world market (Rasiah and

Vinanchiarachi, 2013). Chilean salmon cultivation were boosted by public-private collaboration which sought to attain and transfer knowledge on salmon farming, export standards and technologies from Norway, Ireland and Scotland (Perez-Aleman, 2005). This collaborative expertise went beyond the knowledge advice on market equipment for salmon farming to the establishment of fish-feed production centres (Rasiah and Vinanchiarachi, 2013). This emphasises that the nature of networks and collaborative arrangements can be a source of international technology and knowledge (Osabutey, Williams & Debrah, 2014).

## **Networking Relationships in Internationalisation**

Internationalisation and networking relations have been observed by several scholars within International Entrepreneurship (Coviello 2006; Vahlne and Johanson, 2013). Johanson and Vahlne (2009) argue that with the aid of the internationalisation process, network ties are promoted through knowledge accumulation and trust that reduces the psychic distance of firms. They postulate that the success of a firm is dependent on the connectivity of its supply chains and its position as an 'insider'. When a firm is devoid of a position in the network, it is considered to be an 'outsider's that suffers from the liability of 'outsidership' and foreignness. This foreignness however, makes the internationalisation process impossible. They suggest that becoming an insider requires a learning process in order to foster commitment and trust in the internationalisation process.

Johanson and Vahlne (2009) assert that for internationalisation to be successful, a reciprocal commitment between the firm and its counterpart is required. They further maintain that the creation of knowledge is not a sole responsibility of the firm's own activity, rather it is deeply rooted in networks that are established by producers and product users. *"Now the environment of the firm is assumed to be of a network character with companies embedded in dyadic relationships with other actors, who, in turn, are embedded in other such relationships"* (Vahlne and Johanson, 2013, p. 195). Knowledge about the network with regards to the firm's relationships, partners, their resources, needs, capabilities and strategies is something that is obtained by other firms in the internationalisation process (Johanson and Vahlne, 2009).

Networks of SMEs with MNC in developed economies is critical and can be a source through which external contract can be sourced. This networks has the capacity to provide resources in the form of finance and opportunity for businesses to absorb new innovation in their operation (Scott-Kennel, 2004). For instance, Tang (2011) based his regression analysis on primary data from 210 SMEs in Beijing and Hong Kong and concluded that SME networks provides the resources needed to accelerate the internationalisation process although the development and maintenance of networks may be costly. The effect of networking systems in a rapidly growing economy of Malaysia was probed into by SenSik et al (2011) to develop an 'expert perspective on network model' and concluded that network relationships have an effective means of assisting firms going into the international market.

## **Knowledge Flow in Internationalisation**

Literature on internationalisation emphasises on two kinds of knowledge, experiential and objective (Mejri and Umemoto, 2010) and innovation for firms within the internationalisation process is driven by these forms of knowledge. Their absence, therefore, creates barriers to internationalisation as businesses are unable to appreciate the conditions in the external markets. The barriers, include: understanding foreign business practices, different product standards and consumer standards in foreign countries, and difficulty in obtaining adequate representation in foreign markets among others (Hashai and Almor, 2004).

It suffices to note that internationalisation literature seems to agree that exposing firms to the international market may enhance knowledge and innovation, competence and performance (Bell et al, 2003; Freeman et al, 2013). Casillas et al (2010) examine knowledge and learning from the pre-export phase of firms and conclude that knowledge is positively related to the favourable attitude to initiate a process of internationalisation through exports. Further observation from Casillas et al (2010) confirms Bell et al (2003) to show that new knowledge influences firms positively in the internationalisation process. It further leads other firms to unlearn old knowledge and adopt new ones. This is confirmed by the salmon and mango clusters in Chile and Peru (Perez-Aleman, 2005; Clark and Ramirez,

2013). Through the acquisition and adoption of new knowledge, these clusters have reorganised their structure of production in order to sustain internationalisation.

Literature on internationalisation seems to agree with a sustainable internationalisation which requires the process of maintaining and modifying the flow of knowledge. However, Cesinger and Kraus (2012) note that when an entrepreneurs are exposed internationally, it could induce the rigidity and biases that sustain ethnocentric views and stereotypes. It was proposed that in order to understand and learn about the geographic mosaic of business opportunities across the world, entrepreneurs must be curious and have the desire to do so.

## METHODOLOGY

We adopt both qualitative and quantitative research design which constitute survey from 99 firms and 17 interviews from two fruit processing business clusters. The choice of a mixed research approach sits well within theory and the research questions examining how businesses clusters in developing and emerging economies utilise to their unique features to promote internationalisation. Variables such as export channel, entrepreneur's international exposure, ownership structure and export determining factors were obtained from the survey data and quantified in order to identify the unique features that supports exports within business clusters in Ghana. Using in-depth qualitative purposive qualitative interviews and observations we obtained detail appreciation of the views, perception and experiences of entrepreneurs in utilising the unique features in the business clusters to internationalise (Tashakkori and Teddlie, 2010)

The two clusters in Ghana were primarily selected due to the degree of successes they have experienced in recent years in terms of exporting to international markets (Osei-Amponsah et al, 2012) and the different approaches and unique characteristics (Ayakwah, 2011) that supports exporting activities. The palm cluster is situated in Kwaebibirem, district, a predominantly farming community and it plays a critical function by supporting the local economy where estimates show that there are more than 300 processing palm businesses dominated by small-scale processors (Osei-Amponsah et al, 2012; Ayakwah et al., 2018). The pineapple clusters, on the other hand, is located in Nsawam in close proximity to Accra, Ghana's capital, and therefore benefits from the international sea and air ports. As a result, it is dominated by MNC and private investors who produce for the international markets (Ayakwah et al., 2018).

In order to corroborate the survey data in this study, we concurrently conducted a face-to-face interviews with 17 purposefully selected owners of processing businesses (n=13), farmers (n=2), and distributors (n=2) (table 1). This is to ensure that in-depth non-quantifiable data on the key features that supports exporting activities in the two clusters are appropriately captured to support the survey questionnaires and enhance internal validity of this study (Tashakkori and Teddlie, 2010). The success of the interviews is attributed to the support from the processing association and government support institutions in the clusters and therefore only two processing business owner and a farmer rejected the request.

**Table 1: Study participants/respondents.**

Survey	Palm cluster	Pineapple Cluster	Total
Processing businesses	82	17	99
Interviews	Palm cluster	Pineapple cluster	Total
Farmers	1	1	2
Processing businesses	6	7	13
Distributors	2	-	2
Total	9	8	17

The strategy for analysing the data comprised a number of stages. The first stage involved the initial analysis of qualitative pilot data from which the quantitative survey was developed. Subsequently there was analysis of responses from the surveys using Chi-Square of differences/independence. In parallel, there was analysis of the

qualitative interviews using NVivo with the generation of codes identifying the key themes relating to the key features that commonly support internationalisation in the clusters.

Further analysis was used to determine the unique drivers peculiar to each cluster and how they facilitate the exporting activities. The detailed analysis of the qualitative and quantitative data identified areas of insight for the research questions and a further set of analysis was carried out, triangulating key themes from the interviews and survey in order to facilitate corroborations and identify possible contradictions in the findings. As a result, the validity of the findings of this study was strengthened (Tashakkori and Teddlie, 2010).

## FINDINGS

### Unique Feature Utilised by Processing Business to Export

#### International exposure

The finding shows that significant number of business owners in the palm and pineapple clusters have had international exposure. 95.1 percent and 47% of the owners in the pineapple and palm processing clusters respectively indicated that they have had external exposure (Table 2). The interview data further show that the owners of agro businesses in the cluster have lived and had either been educated or/and worked within the businesses environment in Europe before coming to set up in Ghana to farm, process or distribute palm or pineapple products. Below are two statements from owners of processing businesses in the palm and pineapple cluster that sums up their international exposure.

*I was working in Belgium for over 10 years ... [But]... I initially came with the intention of only schooling. After working for some time a friend of mine introduced me to business opportunities in oil palm processing .... people were willing to buy the palm oil. We began with our plantation in 2003 but we were buying fruits from farmers (Palm case 5; Kwaebibirem)*

*I was staying and working in Italy by then and I realised that MD2 pineapple variety was in high demand ... So I traced it from its source and was told that it was from Costa Rica so in 2000 after it was introduced to Ghana I began farming the fruits for export [pineapple case 3; Nsawam].*

**Table 2: Business owners with international exposure.**

<i>exposure</i>	<i>pineapple</i>	<i>Palm</i>	<i>Total</i>	$\chi^2$	<i>P</i>
External exposure	95.1%	47.0%	86.9%	30.02	0.00**
No external exposure	2.5%	41.2%	9.1%		
To some extent	2.4%	11.8%	4.0%		
Total	100.0%	100.0%	100.0%		

The findings from the interview extracts above show further that businesses owners have leveraged on their external exposure to aid their exporting activities. This is why all the owners of the agribusiness who had either worked or lived abroad demonstrated their appreciation of the international market which may be the reason for their continuous exporting.

#### Presences of multinationals

Another key feature of these agribusiness clusters is multinationals actively partnering with indigenous businesses to churn out output for exports. The findings show the dominance of activities of MNC within the pineapple cluster as compared to that of the palm cluster (Table 3). Over 82 per cent of the agribusinesses in the pineapple cluster are partnerships between indigenous and multinational businesses while over 78 per cent of the agribusinesses in the palm cluster are solely indigenous owned. The manager of a pineapple processing business explain how the presence of multinational businesses has meant that they are able to source for external finance to support their operation and export huge volumes to Europe.

*Most of [the owners] are Dutch and British, we have only one Ghanaian partner who operates this company but used to live abroad. Most of the shareholders are oil tycoons so they have the money. That is where we get our source of income from; and the goods that we sell, the cash flow doesn't come to us directly it goes into a special accounts in the UK.? Of which they give us a little for our operations ... Our products are very heavy and have a longer lifespan of two years for the concentrates. Packaging the volume fill of smaller packs is 1.2metric tonnes and we have about 25.6metric tonnes in our container net weight not gross so imagine, the plane cannot carry it abroad. So we normally ship about 100-200 containers a year depending on the seasons to Europe (Pineapple case 6; Nsawam)*

**Table 3: Pattern of ownership in two fruit processing clusters.**

Ownership	Palm	Pineapple	Chi	P
Indigenous businesses	78.10%	17.60%	17.14	0.00**
Indigenous with Multinational partners	15.80%	52.90%		
Multinational with indigenous partners	4.10%	29.50%		
<b>Total</b>	<b>(100%)</b>	<b>(100%)</b>		

### Presence of distributors

The dominance of distributors in the palm cluster also present a key feature critical to exporting activities in the cluster. The finding shows that over 93 per cent of the palm processing businesses relied on distributors to export their products as compared to a little above 14 per cent in the pineapple cluster (table 4).

**Table 4: Export Channels/Partners.**

Export Channels	Palm	Citrus	Total	$\chi^2$	P	Fishers Exact P
Agents/Distributors/Buyers	93.3%	14.3%	82.7%	26.45	0.00**	0.00**
Company's export team/unit	6.7%	85.7%	17.3%			
Total	100.0%	100.0%	100.0%			

All the palm processing businesses interviewed indicated that distributors have been responsible for buying oil palm for sale by coordinating purchases to local, regional and international markets. These buyers also offer incentives for palm fruit farmers to ensure that there is continuous supply of outputs available for distribution. This has been explained by a small scale processing business owner in the statement below:

*For the sale of the palm oil, there are several modes of selling them but largely through buyers. There are several buyers, some come to buy them to sell for consumption in Accra, and some buy and sell in Togo, Nigeria, Mali and Benin. Others also buy them to export but they are not many.... We are able to get the fruits paid ahead by the buyers for us to process for [buyers/distributors] to export. It is just a few of the processors that deal with these exporters (Palm case 6; Kwaebibirem).*

### Association groupings

The finding also shows that the association relationship is critical for the survival of the businesses activities particularly in the palm cluster. Using rank correlation to present percentages and associated rankings of the business relationship with supporting organisations that support exports. We observed that within the palm fruit cluster, the supporting organisation with the highest patronage is association group while financial institution (FI) is the dominant supporting organisation facilitating export. We observed from the interviews that the association groups in the palm cluster is an important feature for supporting processing businesses to export opportunities in both the local, regional and international markets. The association to the group has meant that prices of the outputs are standardised to avoid any exporter or distributor taking advantage of palm processing businesses in the cluster. Comments from two owners of palm processing businesses offers details on

*I got some buyers for my palm when I was at the meeting ..... we are like family and one cannot produce everything the buyer want. So if a buyer from 'say' Togo, Nigeria or even abroad come with a good price we tell one another ..... At first they come and sell it differently but now we got to know their prices so they can't cheat anyone in the group, we all know the price (Palm case 4; Kwaebibirem).*

*Also, when our member has financial difficulty in milling his/her oil they can come individually and seek assistance from other mill owners in the group for help to complete the process. If you are capable you support so that after their processing they pay back after distributors have bought their palm oil (Palm case 6; Kwaebibirem).*

## **DISCUSSIONS AND CONCLUSION**

The research focuses on the internationalisation activities of business entrepreneurs clusters by examining the key features that supports the exporting activities of business entrepreneurs in developing economy's clusters. The study achieved this by identifying the key unique characteristics that businesses in two fruit processing clusters utilise to support internationalisation in Ghana. The presence of entrepreneurs who have lived, work and gathered relevant experiences in developed economy's markets before settling down in Ghana to set up fruit processing SMEs, mostly in the pineapple cluster (Mayer et al., 2015). The ability of these entrepreneurs to build up international knowledge and practices of foreign markets conditions ensured that they are able to situate their operation within diverse cultural requirements which eludes SMEs (Vahlne and Johanson, 2013; Holden et al., 2015). As a result, SME entrepreneurs in developing economies who ordinarily tend to lack extensive business networks are able to exploit international opportunities (Cuervo-Cazurra, 2011)

Further, the presence of MNCs partnering with local enterprises, predominantly within the pineapple cluster, supports knowledge spillover and flow of capital from abroad which ensure that businesses in the cluster are able to meet the needs of their clients in the international markets. The contractual relationship that local SMEs have with MNCs offered the first opportunity for an engagement with an international business whose structure of operation differ from these SMEs. As a result, they build capabilities through the cross-cultural business relationships in the organisation of business activities (Holden et al., 2015). These MNC provide the standards as a gatekeeper for imbuing or transferring international standards into the operations of businesses and offer the links to international market particularly because of lack of R&D in SMEs in developing economies.

Furthermore, the presence of socially embedded distribution businesses and association group in the palm cluster offer another unique feature of the cluster as they mediate and sustain the sale of palm oil in the international and regional markets (Amoako and Lyon 2015). They act as enablers by supporting SMEs in the cluster to secure resources such as raw materials and finance in the cluster. The informal setting of their operations depend extensively on trust relationships which allow businesses to identify export opportunities not only in regional markets but in internationals (Amoako and Lyon 2015; Ayakwah et al., 2018). As a result, this SMEs are able sustain operation and maintain their competitiveness, particularly within weak institutional environment of developing economies.

The findings are critical to understanding variant ways developing economies can harness entrepreneurial business activities in the world market proceed in order to sustain productivity and economic growth so as to reduce poverty.



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# ON THE NATURE AND CONSEQUENCES OF SERVICE FAILURE AND RECOVERY STRATEGY

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## ABSTRACT

*Academics and practitioners have unquestionably augmented the service discipline with research, although no satisfactory definition of service failure and recovery strategies exists as they are inevitable for service firms both offline and online. Even though abundant studies have been done related to service failure and recovery, to what extent service recovery needs to be investigated so that it is translated into recovery remains unanswered. This paper provides some insights into failure-recovery strategies as competitive tools in computer-mediated marketing environments. The concluding section provides some managerial implications and future research agendas.*

**Keywords:** Service failure, Service Recovery Strategy, Customer Satisfaction, Customer Switching Behaviour, Word-of-Mouth.

## INTRODUCTION AND BACKGROUND

As the popularity of Internet shopping, online auctions and selling fashion products online grows, so the number of complaints about transactions is increasing. Some of the most common complaints involve buyers receiving goods late, or not at all, sellers not receiving payment, buyers receiving goods that are either less valuable than those advertised or significantly different from the original description, and failure to disclose relevant information about a product or the terms of sale. This disconfirmation between desired and actual service leaves numerous clienteles irritated (Ayertey & Ozuem, 2017). Hazée, Van Vaerenbergh, and Armiroto (2017) describe a service failure as a situation when a firm or service supplier fails to meet customer anticipations, whereas the actions taken by firms or service suppliers to overcome the occurrences are described as recovery strategies in the service marketing literature. In the online fashion industry context, the problem associated with the intangibility of services is magnified because consumers cannot directly interact with service personnel. Instead, consumers have to interact with web interfaces, which requires competent management of the technology. Attaining a successful formula for e-commerce is challenging, in spite of numerous advantages of online shopping. Complaints arising from these incidents reflect a wide range of unfavourable consequences, from minor inconvenience to major distress for clients, and companies need to look at customers' individual circumstances when putting things right (Zhang, Omran, & Cobanoglu, 2017). Recovering from such failures is one of the most thought-provoking tasks faced by management and companies, as service failure is a very common situation in doing business. These unfavourable consequences can be minimised by effective service recovery strategies (Strizhakova, Tsarenko, & Ruth, 2012). Thus, the best service recovery strategies can fix mistakes, repair relationships, and build trust. On the other hand, the worst responses will almost certainly result in a loss of both customers and brand reputation. As a result, customer satisfaction is central to maintain positive word-of-mouth.

At the heart of this issue is the need for an improved understanding of customer evaluations of organisational recovery efforts, which is the central theme of this chapter. Research in this field addresses a wide range of issues such as customers' emotional affects in response to service failures, customers' service recovery assessments including attribution of blame and perceptions of fairness or justice, and additional factors affecting service recovery management, for instance customer-firm relationships and branding. These issues are often addressed in disconnected streams of study, although broadly researched, deterring an all-inclusive understanding of service failure and recovery experiences. In response to the separation of failure-recovery experiences from the epistemological approach of

positivism (Choi & Choi, 2014), this paper takes an overview of online fashion customers' subjective paradigm research on service failure and recovery experiences and critically evaluates related literature. Furthermore, social constructionism argues that our knowledge is not derived from the nature of the world as it 'really' is; rather, through their daily interactions, people construct it between them (Burr, 2018).

## THEORETICAL CONTEXT

Online service businesses face challenges in providing a successful service recovery. Since 2002, scholars and practitioners have intensively focused on online service failures and recovery strategies (e.g. Albrecht, Walsh, & Beatty, 2017; Sengupta, Ray, Trendel, & Vaerenbergh, 2018; Azemi, Ozuem, Howell, & Lancaster, 2019). The difficulty of providing effective service recovery has prompted leading scholars, academics and industry experts to several study areas to restore service failures. These include the airline industry (Park & Park, 2016), online retailers (Wang, Wu, Sh., Lin, & Wang, 2011), hospitality (Lee, 2018), business in general (Choi & Choi, 2014; Ozuem, Borrelli, & Lancaster, 2017) and marketing (Sivakumar, Li, & Dong, 2014). Previous research (Sparks & Bradley, 2017; Rosenmayer, McQuilken, Robertson, & Ogden, 2018) on online service failures and recovery strategies has succeeded in assigning meaning to online service failures and categorising these into distinct types. Rosenmayer et al. (2018) recently examined the typologies of service failures and recoveries in the omni-channel setting using complaints on Facebook. Their study reveals the most predominant failures to include problems with delivery, 'bricks-and-mortar' shopping, activities of marketing as well as pricing and communications, problems with customer service and also goods. The authors noted that the distributive, procedural, informational and interpersonal justice dimensions are valid in terms of recoveries on Facebook. Zhu, Nakata, Sivakumar and Grewal (2013) sought to understand customer perceptions of what causes service failure (such as the extent to which it is the customer's or the provider's fault) by means of attribution theory. Further attention has been given to the effects of online service failures and recovery strategies through lenses of bricks-and-mortar antecedents, with fewer antecedents in online service failures being considered (Wang *et al.*, 2011; Sopadjeva, Dholakia, & Benjamin, 2017). Such epistemological orientations limit the potential opportunities inherent in the selling of goods on the Internet (Ozuem, Howell, & Lancaster, 2008). Understanding service inadequacy depends on individual expectations, so approaching the positivist standpoint of customers where failure and recovery processes are concerned should be contextual, rather than generic or standardised.

### Building a Service Recovery Strategy

Diverse issues are assigned to the unfilled space between clienteles and the service provider when a service failure arises. This normally commences with unidentified purchaser complaints which hinder service providers who seek to understand customers' conceptualisations of failure, leading service providers to view customers as diverse in character or content (Sivakumar *et al.*, 2014) when it comes to service recovery strategy expectations. Correspondingly, Bougie, Pieters, and Zeelenberg (2003) affirm that 'most disgruntled clienteles normally do not bother to complain' (p. 390), positioning service providers in a situation where they do not understand the need to make available any kind of recovery strategy. The matter seems to be even more intricate in the context of online encounters where customers do not complain directly to a business but rather take to various social media websites to inform other consumers about the service failure problems, amplifying them and raising awareness. Importantly, online service failures can have a negative impact on profitability and reputational damage. Allen (2017) suggests that clienteles these days complain online more than offline. For customers, the Internet offers a platform that makes complaining effortless yet impactful, and a wide and geographically dispersed audience can be reached. Compared with offline environments, switching is easier on the Internet since clienteles can browse and look for alternative providers with the click of a mouse. Given this background, gaining an understanding of how to manage online service failures effectively is essential to the success of firms operating in an online environment or digital age. Attribution theory (Weiner, 1985; Dabholkar & Spaid, 2012), mental accounting theory (Chuang, Cheng, Chang, & Yang, 2012), the disconfirmation paradigm theories (McCollough, Berry, & Yadav, 2000) and so on have all been used to examine service failure and service recovery. Justice theory has also been applied to investigate how customers respond in terms of their satisfaction following recovery. As recently identified by McColl-Kennedy and Sparks (2003) and Hazée, Van Vaerenbergh, and Armiroto (2017), justice and fairness theory has been of service in increasing

understanding about service failure and recovery. Douglas (2015) and Mandle (2009) added that the philosophies of justice theory depend on equal fairness assessed from all parties in a society. As a result, the recovery evaluation stages and the recovery strategy provision were examined by Siu, Zhang, and Yau (2013). The authors combine recovery assessment with the theory of justice and, specifically, the customers' evaluation of how fairly they were treated in the course of recovery. They further put forward that if a client recognises a fair recovery, his/her prior satisfaction with the firm will be maintained. In earlier research into online service failures, Holloway and Beatty (2003) noted that, following recovery attempts by online businesses, some customers feel a sense of injustice explicitly connected to problems of interaction, distribution, and procedures.

Current research mainly concerns customer reactions at bricks-and-mortar outlets (i.e. offline) to service analysed systematically through research. Studies in this domain underline the importance of fair (or just) service recovery in restoring customer satisfaction following offline service failures (Roschk & Kaiser, 2013; Lee, 2018). Academics and practitioners have unquestionably augmented the service discipline with research, although no satisfactory definition of service failure and recovery strategies exists as these are inevitable for service firms both offline and online. Even though abundant studies have been done related to service failure and recovery, to what extent service recovery needs to be carried out so that it is translated into recovery remains unanswered. Among several recovery actions, compensation is critical because customers desire to be compensated equitably as they may experience loss of time, effort and money due to service failure. The growing body of evidence shows that compensation leads to higher satisfaction than no compensation at all (Fu, Wu, Huang, Song, & Gong, 2015; Roschk & Gelbrich, 2014). In particular, a blend of monetary and non-monetary compensations has the greatest recovery effect; when there is a service failure consumers not only desire a sincere apology from the service provider but also want to be monetarily compensated for their loss (Fu *et al.*, 2015). Online fashion retailers often choose to offer a bundle of monetary and non-monetary compensations, and learning what customers actually want for compensations is critical. Service recovery represents an opportunity to strengthen relationships with consumers and consumers' attitudes are shaped by the extent to which they think they have been treated fairly (Ayertey & Ozuem, 2018; Murphy, Bilgihan, Kubickova, & Boseo, 2015). Others find that overcompensating can be counterproductive, with (Boshoff, 2012) reporting that overcompensation produces lesser satisfaction than a more moderate recovery and (Noone & Lee, 2011) revealing that low and high recovery cash offers induce similar perceptions of fairness. These inconsistent and questionable conclusions propose that more nuanced influences are in play.

## CONCLUSIONS AND MANAGERIAL IMPLICATIONS

No matter how hard companies work to fail-safe their business, service failures are an unavoidable outcome of the imperfect human condition. Well-intentioned owners and employees will inevitably make mistakes that disappoint the customer. Unattended service failures can lead to a multitude of negative outcomes for the business owner including unsatisfied customers, negative word-of-mouth, declining revenues and ultimately business failure. However, it does not have to be this way. A sound service recovery strategy for addressing service failures can turn a negative service encounter into an opportunity for improving the relationship with the customer and the service business itself (Farfan, 2018; Ozuem, Howell & Lancaster, 2019). For a business to transition from service failure to service recovery requires awareness that a service failure has occurred. Most customers are reluctant to complain, which is why it is crucial to encourage and track customer complaints. Employees need to understand that the complaining customer is providing a service to the business. Specifically, the complaining customer has given the company an opportunity to recover from the failure. As importantly, the complaining customer allows the company to diagnose the reason for the service failure to prevent future failures. Having a mechanism for encouraging and tracking customer complaints is necessary for companies to move into a service recovery mode.

Studies repeatedly show that the time between the service failure and service recovery can make the difference between a happy customer and a lost customer (Pang, Hasan, & Chong, 2014). Once a complaint is lodged, it should be quickly acknowledged with an apology. Acknowledgment and apology are the bare minimum that any customer expects as a response to a service failure. Customers will respect companies for taking ownership of the service failure regardless of the true source of blame. At this point, the business needs to repair the relationship and repair the business, in that order. To repair the relationship with the customer, the business should provide options to

the customer. For example: Can the customer's money be refunded? Can the business provide future service for a discount? The objective is to provide reparations to the customer that fully cover the magnitude of the service failure from the perspective of the customer. Many customers will remain loyal to the business if the reparations are sufficiently handled. Whether or not the customer who experienced the service failure remains a customer, the reason that the failure happened should be addressed to prevent future failures. One of the most problematic areas in service failures and recoveries points to poor staff, as research studies constantly reveal (Stratemeyer, Geringer, & Canton, 2014). A well-trained staff is often a step in the right direction in reducing service failures and assisting in service recoveries. While it is difficult to make any service completely fail-safe, the business should strive to make every service encounter a positive one. Doing so will help ensure long-term customer relationships and promote positive word-of-mouth.

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# EXPLORING TECHNOLOGICALLY INDUCED PRACTICE OF ONLINE BANKING: THE CASE OF THE BANGLADESHI BANKING SECTOR

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## ABSTRACT

*Over the last years, online banking has arisen as one of the most commercial e-commerce applications worldwide. Even though earlier research has concentrated on a number of issues that impact on the adoption of information technology or online banking in developed countries, there is limited empirical work which focuses on the challenges of adopting of online banking in developing countries. Researchers and practitioners have identified many factors which influence customers to embrace online banking. Therefore, the aim of this paper is to develop an understanding of the critical elements that determine consumer decisions in relation to online banking in Bangladesh and to provide relevant ideas to banks as to how they can retain customers that use online banking. The paper also develops a model to conceptualize the barriers to the adoption of online banking in developing countries which eventually will deliver long-term benefits for the banking industry in Bangladesh.*

**Keywords:** Online banking, Role of Technology, Customer satisfaction, Quality of online banking, acceptance of online banking.

## INTRODUCTION

It is widely recognized that the banking sector efficiency in any country influences that country's economic growth. Hence, a strong and growing financial sector is recognized as an important tool for maintaining a country's overall financial stability (Al-Smadi, 2012; Al-Jarrah, 2012). Online banking is experiencing rapid growth in developed economies such as the US, UK, Canada, Austria, and France (Tarhini et al., 2015). However, online banking is still a relatively new phenomenon in developing countries like Bangladesh.

A recent descriptive literature review shows that the interest in the topic of online banking adoption grew significantly between 1999 and 2012 and remains a popular research agenda (Montazemi, & Qahri-Saremi, 2015, and Hanafizadeh et al., 2014). To review extent literature it has been found that there are numbers of studies undertaken in developing countries for example in Malaysia (Yu, Balaji, and Khong, 2015), in Nigeria (Tarhini, et.al 2015), in Turkey (Oruç, and Tatar 2017), in Ghana (Boateng, et. Al 2016), in Pakistan (Raza et.al 2015), in Kerala India (George and Kumar 2013), in Columbia (Yoon, and Steege 2013), in Iran (Hanafizadeh and Khedmatgozar, 2012) and so on.

However, most interestingly it also found that by reviewing 165 literature about online/internet banking adoption from 1999 to 2012 (Hanafizadeh et al., 2014) there was no study conducted in Bangladesh. Despite the fact there were few works published in the banking sector but they did not focused on purely an issue and challenges of adoption of online banking for instance Siddik et al (2016) focused on the impact of e-banking performance on of bank, Rahman et al (2016) focused on factors affecting the adoption of HRIS (Human resources Information System), Hoque et al (2015) focus on adoption of E-commerce in Bangladesh, Ahmad et al (2012) problem and prospects of mobile banking. Hence, it shows that literature pays less attention to the issue and challenges of adoption of online banking developing countries, especially in Bangladesh.

Therefore, the primary purpose of this paper is to explore potential factors that influence customer's adoption of online banking in Bangladesh. The paper will also develop a model to conceptualize the barriers to the adoption of online banking in developing countries which eventually will deliver long-term benefits for the banking industry in Bangladesh.

## **CONTEXT: ROLE OF TECHNOLOGY IN BANKING SECTOR**

The rapid flow of the internet has completely changed distribution channels used by the financial services industry. In the presence of the internet using web technologies banks have established and provided customers with the opportunity of performing interactive retail banking transactions (Ozuem et al, 2016 and Ozuem, et al, 2008).

Over the last two decades, the banking sector particular and the financial industry, in general, have been significantly affected by rapid and intense progress in information and communication technology (ICT) (Campanella, Della Peruta, and Del Giudice, 2017).

According to Diza. Munyanyi and Gumbo, (2017) financial innovation have altered the way individuals and companies transact, posing challenges and opportunities for banks and bank regulators. Customers, who are viewed as the recipients of bank products and services have various transaction mechanisms to choose from, some being more acceptable and convenient than others. Technological advancement in the banking sector the world over ushered in a new system where most banks issued customers with bank cards (ATM cards, debit cards, credit cards just to mention a few) which would be used for buying goods and services.

The way banks have organised the technology inevitably changed their business strategies, relationship with customers and all specific functions. Generally, technological innovation has made processing and transmission of information much easier and faster. Due to a wider scale networking based on a set of regional and global connections banking products can be easily marketed. Therefore, it is clear that IT development has transformed the product development, service channels and type packaging of banking services. Not only in the banks themselves this has led to considerable efficiencies but also in all services related to them (Campanella, Della Peruta, and Del Giudice, 2017).

According to Campanella et al. (2013) though, while the advancement of technology has been incredibly rapid, there has not always been a similar evolution in the management processes regarding its use. Thus, a particular issue arises regarding how banking structures and business processes are influenced by technological innovation and how a more positive and sustainable balance between risk and reward in the new setting can be generated by the banking system. Therefore, Campanella, Della Peruta, and Del Giudice, (2017) empirical investigate demonstrate that only some aspects of technological innovation have an effect on the financial structure, competencies, abilities, organization, and economic results of the banking system.

To provide banking service/products to customers the rapid spread of information and communication technology (ICT) has made electronic banking the best channel. Due to its strong impact on business performance, profitability and customer service delivery the quality of online banking services has become a major area of attention among researchers and bank manager (Aliyu, Romain, and Takala. 2014).

In banking technology innovations have been a major force driving changes within the distribution. In the 1070s with the introduction of ATM's, it first began to alter banks distribution channels, followed by telephone banking in the 1980s and online banking 1990s and mobile banking in 1990-2000s (Mullan, Bradley, and Loane, 2017).

With the advent of information technology (IT) and its convergence with communication technology the business field especially the banking sector witnessed an epochal change. Moreover, due to convenience in recent times, it is seen that OB is becoming a more popular banking service among banking customers (George, 2017).

IT development has become unavoidable for the financial services industry and the banking sector has inevitably led the change by implementing IT-based solutions. The bank has received a huge benefit from IT development which is certainly great especially considering that productivity has been enhanced and costs reduced due to increased profitability and labour saving. As a consequence, IT development in banks has been inevitably concentrated on banking products, and retail and wholesale IT products have had a favourable impact on productivity and profitability. Since both IT capital investments and IT human resources are positively related to productivity, the use of IT solutions has increased outputs and reduced costs. Furthermore, the banks' competitiveness has been enhanced thanks to differentiation and customer service improvement, reduction of transaction costs, the ability to better avoid risk, and maintenance of a stable customer base and market share (Campanella, Della Peruta, and Del Giudice, 2017).

**Table 1: Review of key studies.**

Sources	Country-based study	Relevant findings
Jaruwachirat-hanakul, and Fink (2005)	Thailand	To encourage the adoption of online banking factors that appear Features of the website and "Perceived usefulness. The significant moderating factors are gender, educational level, income, internet experience and internet banking experience, but not age.
Nor Pearson (2007)	Malaysia	Acceptance of online banking influenced by trust.
Hahn & Kim (2008)	US	Customers Confidence and trust was a significant predictor of acceptance of online banking and search intention for product information via the online.
Yap et al, (2009)	Not specified	Traditional service quality builds customer trust in the e-banking service. The size and reputation of the bank were found to provide structural assurance to the customer but not in the absence of traditional service quality. Website features that give customers confidence are significant situation normality cues.
Abraham, and Lee 2010	Libya	Investigating the key factors affecting bank staff's attitude towards e-banking technology, a step necessary to understand what makes effective the introduction of e-banking projects in Libya.
Al-Somali et al, 2009	Saudi Arabia	The findings of the study suggest that the quality of the Internet connection, the awareness of online banking and its benefits, the social influence and computer self-efficacy have significant effects on the perceived usefulness (PU) and perceived ease of use (PEOU) of online banking acceptance.
Martins et al, 2014	Portugal	To explain the usage behaviour of online banking the most important factor is behavioural intention to use online banking. Moreover, such as performance expectancy, effort expectancy, and social influence, and also the role of risk as a stronger predictor of intention

Furthermore, because of the increased computerization of the production processes of financial services, a reduction should be seen in the incidence of labour costs on the economic results of banks. In fact, technological development is transforming the sector of financial services from "labour intensive" to "capital intensive" due to the progressive computerization and automation of some service production processes (Davenport 2013).

## **CUSTOMER SATISFACTION AND QUALITY OF ONLINE BANKING**

For any kind of business customers, satisfaction and quality of the service are very important which overall impact on business is. The feeling of customers using a product or service, including its positive effects on customers repurchase and 'word-of-mouth' behaviours can be defined as customer satisfaction. In previous studies, it has been found that customer satisfaction has positive interaction have had a positive effect on both customer loyalty and positive word-of-mouth (Yoon, 2010).

Furthermore, Customer satisfaction is definite as a measure of the performance of an organization's manufactured article or service in correspondence to the needs and requirements of customers. For all organizations, whether they have its place to the service sector, the manufacturing sector, and etc. customer satisfaction has been emerged as an important objective of operating in the relative industry (Hill and Alexander, 2006).

According to Pairot (2008), Customer satisfaction also refers to as the capability of an organization to realize the emotional, business and psychological needs of the potential customers. According to different researches related to the attitude of customers and their adoption of online banking services, it has been observed that various determinants have an impact on the perspectives of customers in the adoption of online banking services which include demography, behaviour and motivation level (Laforet and Li, 2005). However, when the adoption of internet banking is analysed, the variables such as trust, privacy and security are delineated as intensely significant factors from the viewpoint of customers (Benamati and Serva, 2007). Moreover, according to Kotler et al., (2009) customer satisfaction is valuation process of feeling when consumer's associate service or good compared to what is received and what is expected from consumption of the good or service.

Santouridis et al., (2009) empirically investigate internet banking in Greece by examining customer satisfaction and the quality of internet banking services. The researchers have used SERVQUAL model to measure internet banking service quality. The sample size of 200 respondents has been considered for data collection. It has been observed from the results

Of the research that the dimensions of assurance, responsiveness and reliability have a significant and positive impact on customer satisfaction level. Among these dimensions, reliability is found to have the most strong and highest impact on customer satisfaction. It has been recommended that the dimensions which do not have an association with the level of customer Satisfaction should need to be improved by the banking sector.

## **CONCLUSION AND MANAGERIAL IMPLICATIONS**

To the acceptance of online banking, various studies have been conducted in many developed and developing countries. There are many theories of technology adoption and acceptance have been widely used a showed best practices and useful implementations in the context of online banking and widely tested and validated by many researchers.

To the acceptance of online banking in Nigeria Ozuem et al (2016) in their study proposed a number of fundamental factors for engaging customers online. In a practical context in the management government and institutions are involved. Therefore, design, provision, and monitoring of online banking should ensure that customers' and users are not subjected to bad experiences of fraud and identity theft as these negatively influence customer adoption. In addition to monitoring, there should be a structure in place to promulgate and enforce practices to guide the use of internet banking. Part of monitoring the internet is providing customers and members of the public with information on security breaches and what implications it might have on consumers. In such a way negative pre-conception can be challenged and positive attitudes developed. To make the internet available to as many people as possible Governments can play a pivotal role in ensuring adequate provision of telecommunications so service providers can use the routes. Moreover, to create awareness and educate members of the public on the concept of internet technology Banks should invest in purposeful and integrated marketing communications. Furthermore, by using SERVQUAL and other applicable models to determine how much their services have improved over time Banks should continue to measure their level of service quality.

In another study conducted by Ozuem et al (2016) in telecommunication industry found that companies long term success is reliant on building and sustaining strong customer relationships. It also examines how these stimulus customer loyalty alignment and factors that help service providers improve loyalty rates.

Customer service is not only reason consumers remain loyal, there are some other factor e.g. social factors, feedback and innovation from companies must be employed to ensure maintenance of consumer loyalty (Ozuem et al 2014).

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# AFFECTIVE RESPONSES OF LOW-INCOME CONSUMERS TO LOSSES OF SYMBOLIC POSSESSIONS

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## ABSTRACT

*During economic crises, consumers suffer significant losses that deeply affect the constitution of part of their selves, going beyond simple material deprivation and extending to the construction of a hardly acquired identity. Twelve interviews were conducted with consumers who had socially risen and then were hit by an economic crisis. Results suggest that affective responses to losses of symbolic possessions have close resemblance with grief phases (denial, anger, bargaining, depression and acceptance), being felt as the death of an identity. Understanding the affective responses under Kübler-Ross's perspective offers a new approach to the theme.*

**Keywords:** extended self, symbolic losses, low-income consumers, affective responses.

## INTRODUCTION

Brazil experienced a unique economic conjuncture between 2003 and 2013: reduction of inflation and unemployment, real increase in wages, improvement of economic and social indexes and reduction of inequalities. Such scenario led to the rise of a so called new middle class (World Bank, 2007), with annual family revenue in the range USD 6.000 - USD 30.000, stimulating the consumption rate and thus the country economy. The new consumers were avid for products and services that satisfied needs and desires dammed for years (Neri, 2010). The symbolism of consumption was strengthened, composing a new identity of the individual (Belk, 1988), with choices happening for a whole series of new reasons, not so easy to predict and understand.

However, from 2014 on, the scenario suffered a swift change, from economic growth to a swift, deep economic contraction, resulting in significant declines in employment and in a dramatic increase in poverty rates (IBGE, 2016).

Not directly related to income levels, but to the feelings of restriction, the loss of consumption generates a psychological state that changes consumption behavior (Sharma & Alfer, 2012). Several countries have experienced serious economic crises that have affected the population's consumption profile - the United States in 1929 (Bolton, 1978); Japan in the 1990s (Ang, Leong & Kotler, 2000); Argentina in 2001-2002 (Zurawicki & Braidot, 2005); Greece, in 2013 (Tilikidou, 2013) and Turkey (Kaytaz & Gul, 2014).

Those studies revealed that, through their choices of consumption, people strive to elevate their well-being, whose evaluation is often made comparing past experiences with those of the present, (Diener & Oishi, 2000; Diener & Biswas-Diener, 2002; Diener & Seligman, 2002). Corroborating the thought that products influence how consumers see themselves and how they are viewed, Tsai (2005) considers that consumers tend to choose products that provide symbolic meanings recognized in their socio-cultural environment.

A question then arises: which affective responses do they express when lose access to symbols that represented their new extended self? The answer requires reflection upon the process of negotiation and renegotiation of the consumer identity. Black (2011) observed that the study of the losses is a gap to be filled in the literature, once researchers concentrate their focus on the acquisition of goods, services and experiences, dedicating less effort to what is lost. Smyczek and Glowik (2011) have identified a lack of studies dedicated to the knowledge of the individual's



affective responses to involuntary losses. For Black (2011), such knowledge is necessary due to the importance of possessions in the representativeness of the self and in individual formation, suggesting studies on the effects of involuntary losses of the extended self.

Considering that affective responses may be associated with emotions that vary individually, temporally and spatially, this study followed an interpretive line of research, based on existential phenomenology applied to consumer research (Thompson, Locander & Pollio, 1989, 1990).

## EXTENDED SELF AND STATUS

The theoretical basis followed an individual-centered perspective (Belk, 1988). First, concepts of the extended self were approached in James's (1890, *apud* Belk, 1988) seminal studies on self-construction, which influenced Belk (1988) in his theoretical definition of the extended self. To this concept, other contributions were added: Veblen (1899), with studies on consumption behavior of privileged classes; McClelland (1951), on the control of external objects for the conception of the self; Csikszentmihalyi and Rochberg-Halton (1981) on material possessions as signs of the self; Ahuvia (2005), on the extension of the self as construction of the individual throughout life; Lipovetsky (2007), on paradoxical happiness. Following, concepts about the relationship between status and social classes are approached, aiming at a greater understanding of social relations and the processes of identity and identification proposed by Maffesoli (2000).

In the nineteenth century, the first concepts about how the individual sees himself, delineating self-esteem and self-efficacy, were discussed in Psychology - the person is what he believes to be (James, 1890, *apud* Belk, 1988). James has influenced future definitions of self-construction and, consequently, of the extended self, by asserting that the individual is the sum of all that he can call his own: not only the body and psychic powers, but clothes, home, wife and children, ancestry, reputation - the individual is the sum of his possessions, and all these factors arouse emotions (Belk, 1988).

Examining the structural and emotional meaning of specific possessions, Csikszentmihalyi and Rochberg-Halton (1981) proposed that some material possessions, which are valuable and act as signs of the self, are essential to the individual and, hence, represent the created meaningful world. Therefore, consumption is quite often associated with happiness. Richins and Rudmin (1994) identified individuals who, by considering the conquest of goods and possessions responsible for the meaning given to life, place possessions and acquisitions as essential for their satisfaction and well-being. This line of studies was ratified by Corbi and Menezes-Filho (2006) and Lipovetsky (2007), who analyzed the ephemeral happiness provided by consumption.

McCracken (1986) explained that the meaning of consumer goods lies in three aspects: the good itself, the consumer, and the culturally constituted world, cultural meaning moving primarily from the culturally constituted world to consumer goods and, thereafter, to the individual consumer. Often circumstances of loss, sudden impoverishment or alienation show a feeling of mourning and recognition of the cultural significance transferred by consumer goods.

Distancing from McCracken's (1986) cultural perspective - for whom a social structure is given to the subject, who respects and follows it - and turning studies toward the self, Belk (1988), in a more reflexive perspective of the individual, considered that the subject does not necessarily follow a preformed social structure. Belk (1988, 2013) points out that the concept of extended self encompasses both the ME and the MINE. Thus, in order to understand consumer behavior, one needs to understand the meaning attached to possessions. If the individual thrives, he feels triumphant, evidencing this through consumption and possessions that may express more symbolic than utilitarian importance. When the individuals lose them, they may feel diminished (Belk, 1988).

Broadening the thoughts on of the extended self to the digital world of the 21st century, Belk (2013) identified five emerging self-related behaviors: dematerialization, reconstruction, sharing, co-construction, and distributed memory. Evaluated in terms of the individual's understanding of their self, these new behaviors express consumer behavior in social networks and virtual environments, where natural dematerialization of goods and possessions occurs, and status symbols are not tangible (Belk, 2013).

Moving forward to the relationship between identification, social class and status, Martineau (1958) developed studies on society and consumption, and postulated that although money and income are indicators widely used in Marketing, social class offers a richer dimension of meanings. When the individual ascends socially, even unconsciously, he believes that he must send signs of his new social condition, in order not to be associated with the previous state (Martineau, 1958). Maffesoli (2000), in a more individual-centered view, seeks to elucidate questions of contemporary social groups and the relationship between identity and identification. For Martineau (1958), clothing, accessories, personal fashion products are more evident signs of social representation. This conception dialogues with the concepts of Maffesoli (1995), for whom the society, ruled by the power of image, has in the dress code one of the main factors of social representation.

Investigating how the characteristics of social classes influence consumer decisions, whether by functionality or by expressiveness, Henry (2002) found variations in shopping orientations between social classes, based on criteria of utilitarianism and symbolism. While symbolic acquisitions were often found in groups seeking to rise socially, acquisitions based on functionality were related to those that lost social status.

## **Affective Responses to Losses**

Loss triggers the feeling of mourning, which is not necessarily linked to death (Freud, 2013) - it is a reaction to the loss of someone or something. Situations of loss are inherent to the human condition, and pain is a natural reaction in all manifestations of physical, emotional, cognitive, behavioral and spiritual losses (Hall, 2011). If mourning is the price paid for the loss of people, projects and possessions, with which emotional bonds are established, the most painful losses of life are related to those of the self - losing part of who one is leads to the process of deconstruction and reconstruction of the self (Hall, 2011).

Starting from Freud's assumptions (2013), Kübler-Ross (2000) identified five stages of loss: denial, anger, bargaining, depression, and acceptance. Her definitions have been of great value in the fields of Sociology, Psychology and Social Sciences. Kübler-Ross also identified denial in people who refuse to live with material constraints - if they could choose, they would rather die than lose symbolic goods.

Feelings of anger, revolt, envy and resentment arise when the individual no longer supports denial. Patients with high social and purchasing power, feeling threatened with loss, express their anger more intensely, leading everyone around to pretend they still have power and control over possessions and choices (Kübler-Ross, 2000).

The third stage, the bargain, is useful to the sufferer for a short time. Actually, bargaining is an attempt to postpone the inevitable end through promises that may be associated with guilt (Kübler-Ross, 2000).

Depression occurs when denial, anger and negotiation give room to a melancholy feeling: the individual fails to hide their suffering. In the loss of employment or purchasing power, which prevents the provision for the house and the accomplishment of dreams, the individual is led to melancholy (Kübler-Ross, 2000).

Once receiving help, the individual becomes open to acceptance, no longer feeling depression or anger. Although he expresses envy and anger for those who do not share his suffering, his feeling is positive and resigned. This is not a stage of happiness, but instead of resilience (Kübler-Ross, 2000).

The stages identified by Kübler-Ross were applied in the study of losses related to consumption (Lim, 2013) and organizational crises (Manderscheid & Ardichvili, 2008). These studies show that there was a greater concern with waste reduction, a search for more information about the product or service before the acquisition, choice for local brands over international brands, replacement of more refined products with generics, purchases in smaller quantities, preference for stores discounts (Ang, Leong & Kotler, 2000; Zurawicki & Braidot, 2005; Sharma & Alter, 2012; De Nisco *et al.*, 2016).

## METHOD

This study followed an interpretive approach, based on phenomenological interviews (Thompson, Locander & Pollio 1989, 1990), interpreted it from the experience of the individual interviewed, indicating the relations studied in the phenomenon and the respective effects.

Interviewees are individuals who, from 2003 to 2013, ascended from lower social classes to the new Brazilian middle class (Neri, 2010) and then, as a result of the economic crisis, lost symbolically important goods. The authors decided not to apply a formal social classification instrument, because the factors related to status and social class are complex. The interviewees identified themselves as members of the middle class during the period of ascension, building a new identity, failing to see themselves as poor. They were all residents in two districts, with poor conditions and clear social division, in the city of Juiz de Fora, a medium-size (500,000 inhabitants) city in the state of Minas Gerais.

The interviews were conducted by some research interests: Which affective responses (emotions, feelings, moods and assessments) the interviewees of poor origin, ascended economically and socially to the middle class, express in face of losses of symbols that represented their newly acquired extended self?; how have their self been affected?

Selected by convenience, the first interviewees were recruited in one of the authors' network. The others were indicated by them.

The interviews, conducted in the interviewees' homes and lasting between 30 minutes and 3 hours, followed the course of the dialogues, without a pre-defined script, to stimulate the clear expression of the lived feelings. For ethical reasons, prior to the interview, the interviewee was informed about the objectives of the study and authorized his narrative to be recorded, with confidentiality and anonymity, guaranteed by the interviewer. The interviews were later transcribed. The interviewees' experiences and perceptions will be presented from their own perspectives.

## ANALYSIS AND DISCUSSION

From the described life histories, it was observed that all interviewees lost purchasing power, but each individual experienced loss in different ways. The most affected by losses were those who lost jobs. The interviewees that, despite being employed, had to change their activity, thus losing status, income, assets and possessions acquired during the ascension period, now struggle not to return to poor living standards. Other interviewees lost income and purchasing power, having to change their consumption patterns.

By losing symbolic possessions, respondents faced a socially unfavorable condition, going through a cycle of suffering until accepting and overcoming the inability to sustain the ascension identity that identified them with the middle class. Compared to a death in life, the loss of conquests that extended the self represented to them the loss of part of their identity (McClelland, 1951; Csikszentmihalyi & Rochberg-Halton, 1981; McCracken, 1986; Belk, 1988; Richins & Rudmin, 1994b; Thompson & Hirschman, 1995; Murray, 2002; Trudel *et al.*, 2016).

Considering the individual characteristics, it was observed that those who emphasized material achievements suffered the most intense losses, corroborating Trudel *et al.* (2016).

When Isabela lost her job as a radiologist, she denied the loss and its effects, devoting more time to the care of the newborn child and to the second pregnancy. As Hall (2011) identified, she mitigated the effects of loss by concentrating her energy on new searches, so the loss is not always bad. Over time, other losses occurred and led her to reflect, having to sell personal items to clear basic accounts:

*I have already sold my own things (...) Cell phone, I already sold more than three, and I'm still looking for a solution (...) There comes a moment that makes us want to give up, to throw in the towel ... You think you will not get better (...), it seems that it is getting worse and, things become more difficult, bills that won't stop coming ... (Isabela).*

The effects of the loss can be extended to family members, friends and acquaintances. Karina's mother refused to accept her daughter's losses, denying in part her own losses regarding the way of life she experienced when her daughter improved her finances:

*My mother demands me to this day: 'Why didn't you give me money last month, why do not you help me how you helped me before? Ah, my daughter, come here, to our city ... 'I say:' Mother, I don't have money! ' She says, 'But, my daughter, how? You earned so well, you're frugal, you saved money ... Where's your money? ' But she has no idea of how long I've been unemployed, and as long as you do not receive, you spend, and the money is going away ... Not to mention that a good part of that money was even for her, that I helped her ... (...) Before, I went to her house at least two to three times a month. Today I have no condition (...) So, I have not seen my mother for almost six months ... (Karina).*

In the public self, the interviewees hid the truth, trying to prevent their peers to know about their real situation. Even when the loss is noticeable, they try to preserve themselves from social judgments, lying and, or, creating fictitious scenarios in acts to convince their peers that their situation has not been shaken. These behaviors are similar to those identified by Squires and Brouwer (1991) - individuals conceal their identity because they do not feel socially accepted, - and by Black (2011) - individuals omit the loss of status. Just as Wellington did, even if after having lost his job, he would get ready and go out early every day, as if he were going to work: "So, after I lost my job, seriously, I'll tell you, I was so shaken up ... I did not want my neighbors to know that it was my wife who was providing for the house".

Discussions are common when the individual is under the dominance of feeling angry at the loss. Disagreeing with his wife for no apparent reason, Adriano expressed anger at himself (for not being able to keep his job and the comfortable life he enjoyed) and envy of his colleagues (who remained employed). Nervous and insecure about the future, he had intense quarrels with the wife, leading to the end of the marriage: "Then I thought what I could have done to avoid being sacked ... Was I the one who failed? (...) I was very nervous at the time, not knowing what to do. I tried to control the expenses ... That's when my wife left me ..." (Adriano).

The losses of symbolic possessions are explained by means of new options of choice. Having to live with more restricted income levels, they were forced to make changes to balance the budget: contracts were renegotiated in the search for fixed costs reduction; products are purchased in discount stores; travel, food in restaurants, leisure programs and luxury goods were reduced or eliminated. Murray (2002) explored Thompson and Haytko's (1997) interpretation of two opposing perspectives on the use of objects as signs or evidence of identity: the first assumes that the consumer has free access to the game of signs (constituent consumer); the second presupposes that the consumer is imprisoned by signs and codes of the historical moment (constituted consumer).

The consumer behavior of the interviewees was adapted, often prevailing choices of durable and utilitarian items. To experience loss implies effective deconstruction of the newly constructed prosperous identity and preparation for rebuilding another identity.

As this whole process of transforming identity was imposed by unintentional losses and in the face of the impotence to reverse the situation, some of them depreciate their own image: "I am nothing else ... Adriano today is ashamed" (Adriano); "I am nobody, I feel diminished" (Helen); "I feel like the poop of the bandit's horse" (Karina).

By bargaining for consumption options, for having involuntarily losing possessions, respondents have affected their identity of middle class (Maffesoli, 2000), showing how possessions are important components of the sense of self and help in self-perception (McCraen, 1986). Luciano, for example, considers himself to be in a rebuilding process, rethinking his choices, carving out a new identity. Because he suffered losses, he believes he has become more judgmental. In the ascension period, Luciano presented himself with iPhone, iPad, Podcast, conceiving possession of these products as a representation of his successful self: "I am making a good profit, I can pay, I need an iPhone, I do not want a Samsung" (Luciano). At the time of the interview, he wondered about such purchases, not feeling worthy of having such equipment. "In the past, I bought textiles, appliances, furniture to my whole house; nowadays, I would not do such a thing ... Nowadays, I give much more value to my effort, I don't know if I would return to the same consumption level as before. Even having income, probably not" (Luciano). Karina, who lost her job as a multinational sales representative, said: "Wow ... Now what? In the old days, I was the only representative from Brazil and suddenly I was nothing more ... To the market, I was nothing anymore more ... Who is Karina? Nobody knows..."

In a situation similar to the loss of singularity (Goffman, 2001), during the years in which she worked in the company, Karina was absorbing for herself part of a collective identity, with which she was shaping her own. When she was dismissed, she lost her use of the company name, as if she were losing part of her social identity (Tajfel, 1978; Tajfel & Turner, 1979): her name, surname, professional occupation and social function, representing an important change in identity, habits and dreams. For her, one of the great symbols of ascension was the sofa, an expensive piece acquired during the period when she worked and received a high salary. To lie down was the prize of a long and tiring day of work. But she had to sell it to the owner of the property in return for not being able to pay the rent.

*My couch, I sold it to him, and it still hurts a lot in my chest 'cause it was very good ... And it was the great image of the well-being of the house, because I got home and the first thing I did was to throw me on it. Nowadays, I just look at it.... I mean ... I know it's there, but I can't enjoy the couch anymore ... I do not deserve it anymore... It's that simple ... (Karina)*

Caring for appearance is one way of expressing the extended self. The impossibility of attending a beauty salon as before, having to reduce the care with appearance due to the income reduction, affected Maria's newly constructed identity, reflected in her low self-esteem: "Then there's the other side too: you should have your hair done, but you no longer can, it messes up with one's self-esteem" (Maria).

Affected both psychologically and financially by the crisis, consumers acquired different habits in relation to the period of ascension. By changing their consumption behavior, they began to build a new identity.

Despite the distinction between possessions of physical value and possessions of sentimental and symbolic value, both categories constitute extension of the self. The accumulation of possessions, in addition to imparting a sense of the past, informs us who we are, where we came from, where we are and even where we are going. Rather than simply having goods or objects, the feeling of possession becomes integral to its owner (Belk, 1988). As we become aware of the change in consumption, we realize that the loss of certain goods is more than simply "losing something", it is to lose part of oneself and the new life, as Vagner expressed: "I died ... who am I now? I am nobody ... I have to be born again" (Vagner).

It was evidenced that the interviewees, in the period when they ascended socially, migrating from less favored classes, strived to achieve a middle-class lifestyle, often represented by symbols status. Veblen (1899) has shown that the cultural significance adjacent to consumer goods goes beyond simple individual-object relations, elevating to status. The interviewees identified themselves as members of the middle class, changing their levels of consumption. As in the findings of Martineau (1958), Berkman (1976) and Coleman (1983), this identification was a determining factor in buying behavior. The status represented by symbolic possessions projected the respondents to higher social positions. Necessity ceased to refer only to food, clothing, and shelter, and came to mean status, represented by symbolic items, which extended the self (Belk, 1988; Thompson & Hyschman, 1995; Murray, 2002; Ahuvia, 2005; Trudel *et al.*, 2016), of which the individual was not willing to give up.

In the same way as it was pointed out in studies carried out in other countries, the crisis in Brazil also posed a threat of damnation to poverty. Several respondents demonstrated this concern, that the prosperity dream was threatened. Today, being hardly hit, they embody the Greek myth of Sisyphus, who was condemned to repeatedly push up a rock to the top of the mountain, that rolled again to the starting point, invalidating his effort. Respondents - affected by the involuntary loss of possessions due to the crisis - are indebted, trapped, deconstructing dreams, avoiding consumption, insecure about the future, and fearful of returning to the condition of being poor.

In this study it was observed that the interviewees, in the attempt to protect the newly constructed prosperous identity (Veblen, 1899; McCracken, 1986; Belk, 1988; Thompson & Hyschman, 1995; Murray, 2002) first denied their losses, for themselves and in the public self (Black, 2011), preserving their identity of judgment by third parties (Squires & Brouwer, 1991). Some respondents, trying to defend their identity (Squires & Brouwer, 1991; Murray, 2002), have maintained unchanged habits for a long time, denying the losses to themselves and others until they could no longer neglect them.

Individuals in similar situations of loss are affected in different ways. Although each respondent perceived and experienced their losses differently, these affective responses surfaced as a backdrop, presenting them in a similar way. Words, gestures, objects or memories triggered the anger, intensified or softened the depression, stimulating mechanisms that led to the logical thought of the need to make choices, meaning, to bargain.

Emerging when estrangement, anger and bargaining give way to a deep sense of loss, depression is associated with preparation for effective acceptance (Kübler-Ross, 2000). There were those who, declaring themselves fragile and apathetic, felt guilty for everything and with no expectations for the future. Adriano started using alcohol, feeling depressed and now spends most of his time in the bar next to his house. Affected by a deep sense of sadness, Karina suffered a miscarriage and today interprets this fact as a consequence of depression: "I was very sad, I discovered a pregnancy and lost the baby. And I realized that when you are bad, if you let it dominate you, you will get worse and worse. I was very depressed ..." (Karina).

Externalizing or not feelings, the interviewees who overcame depression became calmer, eliminating negative thoughts. Mauro, in accepting the losses, built a new identity, returned to live with his mother and assumed the status of head of the family. Today he is happy with his new way of life: "Today I can't go out with the friends I left when I worked ... I can't afford the nights out anymore. And I do not want to any more. Today I have fun at home. And I feel very happy about it".

An individual transformation cycle was generated in the interviewees, for whom the choices began to shape the observable behavior of consumption and to reflect on the reconstruction of identity. This study sought to show that, through the loss of symbolic possessions, the self-extension builds up the identity of the individual, in a dynamic process. In response to the lived experiences with the losses, the identity is being altered.

Items that represented achievements, raising the expense patterns of the respondents, were sacrificed, through exchanges and negotiations, altering their extended self (Belk, 1988) and preparing them for the building of the identity that they could afford to live at that moment. This highlights the importance of possessions for the sense of self and for self-perception. Throughout this process, interviewees often did not recognize themselves until they accepted their new condition and rebuilt a new self (Veblen, 1899, McCracken, 1986, Belk, 1988, Thompson & Hirschman, 1995, Murray, 2002; Ahuvia, 2005; Thudel *et al.*, 2016).

Future studies can be conducted to elucidate ownership-identity relations and harmful effects of consumer appreciation in contemporary society. The finding can be applied to financial products, trying to show how emotions can contribute to a financial education campaign, since it is increasingly evident that it is not the lack of financial knowledge that leads to indebtedness, but consumer behavior. Understanding affective responses to involuntary loss may facilitate the understanding of financial education programs and actions that are of great relevance to society.

In addition to experiencing the Greek myth of Sisyphus, the interviewees of this study can be related to the Phoenix legend- a symbol of Greek mythology of resurrection and strength, a bird capable of being reborn from its own ashes. Overcoming difficulties and rebuilding themselves with strength, determination and creativity, the interviewees try to rebuild themselves in search of a new identity: in the end, they struggle to be reborn from their own ashes.

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# RESEARCH ON THE EFFECT OF CAUSE-RELATED MARKETING ATTRIBUTES ON CONSUMER CHOICE

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## ABSTRACT

*Cause-related marketing describes the marketing strategy that links the specific products or services to corporate philanthropy with the goal of finally achieving a win-win solution for both the corporate and the society sides. This article conducts a conjoint analysis of the key attributes of cause-related marketing mentioned in the previous studies (including fit of the brand and Cause-related marketing activities, coverage of the Cause-related marketing activities, duration of these activities, the endowments forms and communicating ways). The result shows: (1) consumers place much more weight on the communicating ways (weight for 31.1%); (2) the most popular attributes mix of cause-related marketing is that the marketing plan with high fit between the corporate and Cause-related marketing activity, covering the whole country, during long time, donating cash and focusing on the causes. Finally, we provide the management implications based on the empirical research.*

**Keywords:** consumer choice; cause-related marketing attribute; conjoint analysis.

## INTRODUCTION

As a common way for enterprises to practice social responsibility, Cause-Related Marketing (CRM) is regarded as a win-win marketing strategy for enterprises and society by linking philanthropic donations with the sales results of specific products or services since 1980s. After almost 40 years of practice, the academia has summarized the design and specific application of enterprise's Cause-Related Marketing activities. Prior researches have discussed the concept (Varadarajan & Menon; Andreasen), basic types (Brink, etc.), its impact on participating enterprises and non-profit organizations (Brown & Dacin; Becker-Olsen & Hi et al.). Especially, it has done a great significant development of the research in this field by some experimental design and empirical study of a certain attribute effects of Cause-Related Marketing. These studies proved that Cause-Related Marketing help to improve sales performance, obtain customer retention, reduce customer sensitivity to price, shape employee loyalty and enhance corporate image (Deshpande & Hitchon).

However, due to the limitations of research methods, such studies can only test one or two factors in the experimental framework of Cause-Related Marketing. Furthermore, it is difficult to eliminate noise interference sometimes, which leads the conflict of the research conclusions from different perspectives. So enterprises could not take actions in practice based on the semi-finished theories. This study tried to research the combinations of attributes which could be evaluated best performance by consumers. It chose five key attributes of Cause-Related Marketing, which effects are inconsistent or not fully verified by previous studies first.

## THEORETICAL BACKGROUND

Previous studies have explored the impact of many attributes of Cause-Related Marketing on consumer attitudes and behavioral intentions. There are many attributes of good cause marketing, scholars pay attention to one or several of them for different research purposes, design relevant experiments to study their effects, and draw many meaningful conclusions. These studies focused on the types of cause-related activities, the fit between cause and brand, the duration of the activity, the coverage area, the form and scale of donation, and the characteristics of publicity. It should be pointed out that the attributes of this research design are either inconsistent or inconclusive in previous studies, and the inconsistency of current theoretical exploration is probably due to the influence of other variables. Therefore, it is suitable to carry out joint analysis and test under the condition of multiple clues.

In 1964, Luce and Tukey first proposed the concept of Conjoint Measurement from the perspective of psychology, pointing out the decision-making mode can be used to decompose the total evaluation through the basic measurement of the sorting of objects. Green and Rao have applied them to the study of consumer purchase decisions. Since then, this method has been widely used in consumer goods, industrial products and commercial services and other related areas of market research.

The basic idea of conjoint analysis is: according to a number of product attributes and the specific level of each attribute, a variety of products are formed, which require consumers to sort or rate these products, to use statistical techniques to process the sorting or scoring results, and to estimate the "utility value" of each attribute level. On this basis, the relative importance of different attributes and the most popular product portfolio are obtained. There are a variety of different data collection methods for conjoint analysis, such as full profile approach, hybrid approach, the self-explicated approach, and discrete choice-based approach, (CBC). It can not only analyze the importance of quantitative attributes (such as price), but also the importance degree of qualitative attributes (such as brand name); the implicit utility value of consumers can be quantified scientifically and visualized, and the importance of product attributes to consumers can be measured more truthfully.

Conjoint analysis method has also been used by some scholars in the research of good cause marketing. For example, Pracejus and Olsen use selective joint analysis to explore the impact of the degree of matching between brand and good cause on consumer choice behavior. This article uses the currency to convert the value of the brand and good cause to the consumer, and finds that the value brought by the high matching degree is 5-10 times of the low matching degree.

## METHODOLOGY

This research regards the good cause marketing activity as a kind of "product" designed by the enterprise, which meets the needs of the consumer to participate in charity, and the enterprise also gains the benefits of fame, market share and so on. By analyzing and selecting the attributes of the good cause activity, the joint analysis method is used to measure the relative importance degree of each attribute, so as to design the good cause marketing product that best meets the needs of consumers.

After combing the literature, this paper selects the matching degree between brand and good cause business, the duration of good cause activity, the geographical scope covered by good cause activities, the donation form of good cause fund and the promotion of good cause as the important attribute of good cause marketing. According to the specific situation of each attribute of good cause marketing, the research divides the matching degree of brand and cause of good cause into two levels: high level and low level. The duration of good cause activity was divided into two levels: long duration and short duration (in this study, the long duration of the activity was 3 years or more, and the short duration was less than 6 months). Divide the area covered by the good cause activity into local/national two levels, and divide the donation form of the good cause fund into two levels: percentage donation/absolute donation, the attribute of good cause marketing is divided into three levels: propaganda enterprise, publicity of public welfare and the balance between the two. This study did not include the type of good cause in the selection framework because of its numerous classifications. Such as primary vs. secondary needs, saving lives vs. improving the quality of life, the

severity of good causes, protecting animals, protecting the environment, health, and human services, etc. Therefore, it is difficult to design a targeted level. In addition, the classification is highly correlated with the degree of matching. Therefore, this study incorporates the degree of matching into the framework of consideration.

Since there are 5 main attributes of good cause marketing selected in this paper, considering the specific level of each attribute, the number of combinations of different good cause marketing “products” will reach  $2 \times 2 \times 2 \times 2 \times 3 = 48$ . In order to lighten the burden of evaluation, the orthogonal experimental design was used to form 8 kinds of experimental products.

After determining the product portfolio of the survey, the consumer will evaluate the product portfolio. Scoring and ranking are common evaluation forms, which show the preference of individual consumers to each product portfolio and reveal the degree of importance degree that consumers attach to the attributes of each product. In this paper, the questionnaire is used to collect the evaluation data. The questionnaire respondents will read 8 news materials of a beverage enterprise for good cause marketing. The content of each material is organized according to the relevant information in Table 1. After reading the material, the consumer should score the 8 good cause marketing activities of the enterprise, and answer an open question to explain the basis of the score. The last part is part of the personal information of the respondents. Consumers are invited to fill out the questionnaire through professional market research company. A total of 320 initial questionnaires were obtained, 34 invalid questionnaires were eliminated, and 286 valid questionnaires were remained.

Descriptive statistical analysis showed that the ratio of men and women in the sample was relatively balanced and had good gender representation; in terms of age structure, the proportion of 18-45 years old samples reached 98.2%, basically could represent the most active consumer groups; in terms of academic structure, college degree and above become the main body of the sample, accounting for 98.6%.

There are many models and methods for calculating attribute utility. Ordinary Least Square Regression (OLS) is a common model. The OLS (ordinary least square) model is used to analyze the simulation matrix composed of a set of independent variables. Each independent variable indicates the presence or absence of an attribute level; the dependent variable is the subjective evaluation value of a profile described by the customer for the independent variable. Set the following model:

$$U(X) = \sum_{i=1}^m \sum_{j=1}^k a_{ij} x_{ij} \quad (1)$$

Note:  $U(x)$  refers to the utility of all attributes;  $K$  = the number of levels of attribute  $i$ ;  $x_{ij}=1$  represents that the  $j$ th level of the attribute  $i$  appears, and  $x_{ij}=0$  represents other cases;  $m$  = number of attributes;  $a_{ij}$  represents the utility of the  $j$ th level of attribute  $i$ .

The relative importance degree of each attribute can be calculated by equation (2), where  $C_i = \{\max(a_{ij}) - \min(a_{ij})\}$ , and  $W_i$  represents the relative importance degree of the attribute.

$$W_i = C_i / \sum_{i=1}^m C_i \quad (2)$$

In order to estimate the parameter  $a_{ij}$  in model (1), the dummy element method is usually used to reduce the parameters, and the ordinary least square (OLS) method is used to estimate the model parameters.

## DATA ANALYSIS

This research used the joint analysis module of spss20.0 to process the consumer evaluation data. It can be seen that the most important factor in consumer evaluation of good cause marketing is its propaganda attribute, and its relative importance weight is 31.1%; the second is the brand and good cause matching degree attribute, its relative importance weight is 19.1%; The relative importance weights of the remaining three attributes are relatively close: the relative importance weights of the form of fund donation, the coverage area of good cause activities, and the duration of activities are 17.3%, 17%, and 15.4%, respectively.

From the specific attribute level utility score, good cause-oriented propaganda has brought the greatest utility to consumers, reaching 0.111; enterprise-oriented good cause marketing propaganda has brought the lowest utility to consumers, and its utility score is -0.208. After calculating the utility of each attribute level, according to formula (1), the total utility of 48 good cause marketing attribute combinations to consumers can be calculated. Table 5 shows, from high to low, the eight combinations of the largest and smallest utility of the 48 product combinations.

The data analysis result shows that the attribute characteristics of good cause marketing which are most welcome by consumers are: the brand and good cause have a high degree of matching, the good cause activities cover the whole country, the duration is long, the fund is donated in absolute numbers, the propaganda is good cause-oriented, its total utility value which brings to consumers is 0.395. The attribute characteristics of good cause marketing with the lowest utility value are: the brand and good cause have low degree of matching, good cause activity covers local area, the duration is short, the fund is donated in percentage, the propaganda is enterprise-oriented, its total utility value is -0.492.

What consumers value most is the propaganda attribute, which has a relatively important weight of 31.1%, which is much higher than other attributes of good cause marketing. From the attribute level, consumers prefer the good cause marketing propaganda which is good cause-oriented; the second which consumers value most for good cause marketing attribute is the degree of matching between brand and good cause, its relative weight is 19.1%. Compared with the good cause marketing with low degree of matching, consumers prefer the good cause marketing with high degree of matching; the relative importance weight of the form of good cause fund donation is 17.3%, and the consumers are more recognized to donate in absolute number form; the relatively importance weight of the area covered by the activity is 17%. Consumers prefer to cover a wide range of good cause marketing, which can benefit more people; the relative important weight of the duration of good cause activity is 15.4%. Compared with the short period of good cause activity, consumers prefer long term good cause marketing activities.

## CONCLUSION

It is suggested that enterprises should fully consider the consumers' preference for the attributes of good cause marketing when designing a good cause marketing scheme. Under the condition of resources permitting, the enterprise should choose the cause of good cause with high matching degree with brand and wide range of benefits, and take the form of quota donation for long-term financial aid, and at the same time attach importance to publicizing the good cause matter rather than the enterprise itself. Because this kind of attribute combination is most favored by the consumer.

Pay attention to the propaganda and continuous progress of good cause marketing. The results of the joint analysis show that consumers are very concerned about the propaganda attributes of good cause marketing, and their preference is even higher than the matching degree between brand and good cause. Why do consumers value this attribute so much? This study believes that this may be related to the ongoing charity scandals in recent years in China. Because of questioning the motivation of corporate donation and the credibility of charitable organizations, consumers have a considerable degree of doubt about the authenticity of the marketing activities of this kind of good causes, and the destination of funds raised by the activities all show a considerable degree of doubt. Therefore, enterprises should not only pay attention to the propaganda of activities during the good cause marketing promotion, but also have a mechanism or platform to continuously report the progress of the good cause to the consumers, so that consumers can more clearly understand the actual help provided by the participants for the good cause. In this way, consumers' concerns can be dispelled, and good cause marketing can truly achieve a win-win situation between the enterprise and the society.

Limitations of research methods. This study uses joint analysis to try to explore the impact of various attributes of good cause marketing on consumers. Compared with traditional experimental methods, joint analysis can accommodate more product attributes, making each good cause marketing plan more in line with consumer's usual contact with the real situation. But because the method is still based on testing, there is still a difference between testing and consumers' actual buying behavior. At the same time, the method can accommodate not too many attributes of the product, so that each attribute can be easily divided into different levels, so it may not be able to include all attributes of good cause marketing.

Limitations of selected products. The product selected in this study is mineral water, which belongs to low value fast moving consumer goods (FMCG), and the research conclusion may be more valuable to fast moving consumer goods (FMCG) enterprises. There is a great difference between fast moving consumer goods and durable goods in product attributes. Some studies also think that absolute quantity donation is more suitable for sales promotion of low priced products, while proportional donation is more suitable for high-priced products (Chang). Therefore, consumer durables should be cautious when applying this conclusion.

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# INTERNAL MARKETING IN THE CYBERSECURITY ENVIRONMENT

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## ABSTRACT

*The aim of the paper is to discuss how internal marketing is a technique to minimise the impact of cybersecurity issues in an organisation. The premise is then cybersecurity is everyone's responsibility and to energise the organisation requires employee engagement and commitment. However, senior management leadership is also a prerequisite, which requires open dialogue across the organisation. Internal marketing requires a customer-centric or market orientation, which might require a change in organisational culture, which again requires leadership from the top. However, internal marketing alone will not solve the cybersecurity threats, but goes some way to reduce threat and ensuring employees are aware of the impact on the organisation and on their external customers. With this in mind employees will become more vigilant on taking a proactive approach to cybersecurity*

**Keywords:** internal marketing, cybersecurity, organisational culture, employee engagement, market orientation.

## INTRODUCTION

Cybercrime will cost societies \$6 trillion annually by 2019, which is twice the cost of what was paid in 2015. Escalating at this rate requires serious action to be taken by organisations, society and governments. To combat cybercrime currently \$1 trillion is spent on cybersecurity (radiusits.com). The focus of this paper is on the internal environment of the firm from the perspective of internal marketing to combat the internal threat of cybercrime, and improve awareness of cybersecurity by using an internal marketing lenses.

The organisational landscape has a bearing on the effectiveness of combatting cybersecurity issues (Nye, 2017). Cybersecurity combines "public good" attributes, frequently associated with governmental responsibilities for private market goods and services, and private organisations with non-market, non-governmental resources, and information sharing. Management of the governmental responsibilities require a robust governance structure (Kuerbis & Badiei, 2017). The paper suggests that not only governments and nations have a responsibility for cybersecurity, but the organisation and employees have ownership of the governance structures internally to mitigate the effects of cybercrime. Furthermore, some of the responsibilities of government needs to be cascaded down to organisations to gain the organisational commitment necessary for organisations to defend their organisation and employees against cybercrime. Shackelford & Kastelic, (2015) suggest there is a growing agreement that nations need to take responsibility for enhancing cybersecurity. Ultimately, governments and nations will require to engage organisations in cybersecurity, and organisations must shoulder more of the burden of cybersecurity. To ensure firms are ready to engage with the responsibilities of governance and activities related to cybersecurity, the paper contends that an internal marketing approach is necessary, because cybersecurity is everyone's responsibility, and employee responsibility is a key driver to guarantee cybersecurity safeguarding of the organisation.

# THEORETICAL CONCEPTS

## Determinants of internal marketing

“Market orientation”, “market-driven” or “customer orientation” are used interchangeably and have a component of internal marketing orientation (IMO) (Naude, Desai & Murphy, 2003). There is no agreed definition of the internal marketing construct (Rafiq & Ahmad, 2000). The use of marketing approaches within the organisation to create and publicise overall corporate values is an integral part of internal marketing (Hogg & Carter, 2000). The paper is positioning IMO as an important factor to embed a positive factor to embed employee engagement in detecting and preventing cybercrime within the organisation.

Schneider, (1990) and James el (1979) consider perception of organisational climate is based on “person” and “situation” variables. Person x situation = perception of organisational climate. Table 1 identifies the variables (Person and Situational) and the perception of the organisation (situation x person).

**Table 1: Possible determinants of internal marketing (Naude, Desai & Murphy, 2003).**

<u>Variables</u>		
Person	Situation	Person x situation
1 Age	4. Location	7. Organisational socialisation
2. Gender	5. Tenure	8. Involvement
3. Level of education	6. Function	9. Commitment
		10. Organisational satisfaction
		11. Communication
		12. Evaluation of local management
		12. Evaluation of direct manager
		13. Evaluation of colleagues

Naude, Desai & Murphy, (2003) develop the following hypotheses for the variables in Table 1:

1 IMO will vary by age – younger age groups and generations will have stronger attitudes, and transfer the expectations to the organisation. A significant factor is age as a determinant of IMO. This implies that younger people’s attitudes would need moulding to the organisational cybersecurity policies and procedures to ensure consistency in the operational requirements.

2. IMO results from males (gender) will be positive. The results bear this out that there is a positive outcome between males and IMO. Females tend to be more critical than men. This particular variable is not significant as a determinant of IMO.

3. IMO results will correlate to education i.e. the higher the level of education the more critical the individual. The higher the level of education the more negative the perception of the organisation. This particular variable was not significant as an influencer of IMO.

4. Different locations will view the organisation’s IMO differently. This hypothesis is significant. This could be due to the different tasks being undertaken at the different sites. This requires organisations to ensure the culture of cybersecurity is consistent, so employees that locate from different locations with the firm will have a consistent approach to the threat of cybersecurity.

5. The length of tenure correlate positively with IMO. The length of service correlates positively with IMO and is thus significant. Once a cybersecurity culture is in place, then from an IMO perspective those with long tenure under this culture could be more critical of the new culture and become less vigilant on cyber-security threats, than new employees.

6. Different functions evaluate IMO differently. This is not a significant determinant of IMO.

Reviewing the person and situation variables only age, tenure and locations are significant determinants of IMO.

7. Organisational socialisation correlates positively to IMO. Organisational socialisation is defined “ as the process by which an individual comes to appreciate the values, abilities, expected behaviours, and social knowledge essential for



assuming an organisational role and for participating as an organisational member” (Louis, 1980, : 229 -230). There is a correlation between IMO and organisational socialisation. However, higher levels of socialisation depends on the ability of the employees to cope positively with their work. The implication for cybersecurity is that employees that are less able to cope with their work, would be less able to exhibit the cybersecurity values and behaviours expected.

8. There is a positive relationship between the degree of involvement and a respondent’s IMO. This appears to be the case that involvement has a high significance on IMO. Engaged and involved employees are more willing to exhibit the necessary behaviour expected in a cybersecurity environment.

9. Commitment is positively related to the perception of IMO. This hypothesis is significant in its effect on IMO. Commitment is related to organisational goals and the individual acceptance of the goals. Also a sense of belonging is an attribute of commitment.

10. Organisational satisfaction is linked to three dimensions i.e. reward satisfaction, stimulation from work and work load. The three factors are positively related to IMO.

11. Communications construct has two dimensions openness and information accuracy, which are positively related to IMO. Accuracy of information is slightly more significant than openness.

12. Employees’ perception of local management’s IMO correlates positively to their overall perception of the organisation’s IMO. The employees’ perception of local management market orientation is positively linked to IMO scores.

13. Employees’ perception of supervisors’ level of IMO correlates positively with the individual’s perception of the organisation’s IMO. The employees’ perception of their supervisors’ market orientation is positively linked to IMO scores.

14. Employees’ overall perception of the company’s IMO correlates positively with their relationship to co-workers and their perception of their colleagues’ market oriented behaviour. The perceived level of market orientation of colleagues does influence other employees own perceived level of IMO.

The most influential variables on IMO are location (which depends on job function), length of tenure and age. The person x situation variables show that local and direct management, socialisation and satisfaction factors are important contributors to IMO.

## Internal marketing tools

Understanding internal marketing in terms of marketing principles and the context of employees has been researched for more than 30 years (Berry et al, 1976). Traditional communication techniques of promotion, such as advertising and personal selling are common approaches to promote products to external customers. These techniques are also used to communicate with employees (Berry, 1981). Berry et al, (1976) related internal marketing to employees (internal customers) and jobs as products. Munir (2015) suggests that internal marketing is not just about communications tactics, such as employee commitment, workplace posters and employee meetings. Internal communication is a significant component of internal marketing. Furthermore, internal communication is the new employer- employee contract (Varey & Lewis, 1999). Effective management of internal communications could bring many organisational benefits (Piercy & Morgan, 1995).

Internal marketing in many parts of the literature is associated with marketing techniques in a human resource management resource context to continuously improve employer – employee relationship to satisfy employees and customers (Kotler & Armstrong, 1991; Wildes & Parkes, 2005). Abzari, Ghorbani & Madani (2011) consider internal marketing as part of the human resource function.

Furthermore, research suggest that training is an underpinning dimension of internal marketing, which can be sub-divided into four categories, namely service standards, training, development programmes and rewards (Papasolomou & Vrontis, 2006). Lee & Chen (2005), further conceptualised that internal marketing as having five functions, namely recruitment, training, incentives, communications and retaining employees, all are human resource functions. 11 of the 42 internal marketing definitions focus on training apart from customer focus (Huang & Rundle-Thiele, 2015). Implementation of internal marketing requires employees with skills and information (Paraskevas, 2001). Internal marketing requires employee know-how and autonomy to meet their wants and needs (Ballantye, 1997).

Internal marketing research is an important starting point, which will be survey-based on internal marketing practices measurements Huang & Rundle- Thiele, 2015). The type of data that could be collected include:  
 Supervisors clearly state their expectations of other (Bearden & Niemeyer, 1999);  
 Receiving feedback from supervisors that informs the employees' progress (Bearden & Niemeyer, 1999);  
 Supervisor clearly states expectations of me (Bearden & Niemeyer, 1999);  
 Supervisors does a good job of sharing information (Bearden & Niemeyer, 1999; Naude', Desai & Murphy, 2003; Tsai & Tang, 2008);  
 Communication is weak between departments and employees (Peltier & Scovotti, 2005);  
 Employees can reach managers easily (Chang & Chang, 2008);  
 Employees have a solid understanding of the ways the organisation evaluates their work (Karasa et al, 2008; Chang & Chang, 2008); and  
 Employees at all levels understand the direction and key priorities of the organisation (Huang & Rundle-Thiele, 2015).

In order to embed cybersecurity practices and governance an internal marketing approach requires engagement with employees to create dialogue and understanding of the organisation and management expectations from the process and practices. Dialogue between employees and ensuring information is relevant and accurate will underpin the success of embedding cybersecurity practices. The model to embed cybersecurity practices include internal communications, training and internal research. Although all dimensions are significant, training is the most important. Worth noting is that the model is based on western culture, and differences are likely to occur in eastern culture.

## **Internal marketing and cybersecurity environment**

Data security and privacy are pressing issues facing marketing today (Ferrell, 2017). The domains that are suggested as important to marketers are related to consumers, organisational, ethical, and legal (Martin & Murphy, 2017). Consumers, organisations and regulators are important stakeholders. Organisations collect and use consumer data for marketing activities, which are required for marketing activities. Consumers sacrifice privacy so that marketers can understand their wants and needs, which is necessary to for competitiveness (Romanosky, 2016). Organisations have a responsibility and opportunity to protect consumer data. The organisational culture should press for increase cybersecurity internally (opportunity for internal marketing and its ability to influence organisational culture) and externally. Consequently, organisations need to carry out risk assessment on use and protection of the data. Marketing research needs to investigate the interface between using and acquiring data. Marketing requirements for big data and data analytics suggest that most organisations are at risk (Ferrell, 2017). This suggest that cybersecurity is the responsibility both legally and ethically for organisations and they have a responsibility to develop and implement governance rules and processes for handling data internally.

Understanding the nature and properties of privacy ethic is a step in the right direction to prevent cybersecurity issues. Organisations interact with regulatory and legal bodies to ensure and develop compliance, but this interaction could lead to conflict (Martin & Murphy, 2017).

Decisions on cybersecurity are a strategic decision. Ferrell (2017) state that ethics form part and parcel of every strategic decision in the digital environment. Understanding the risks digital systems put on consumers is important. The systems contain diverse and sensitive information, such as credit card details and national insurance numbers. Understanding the risks associated with holding this data is paramount. Donaldson & Dunfee (1994) suggest research around stakeholder norms and based on integrative stakeholder theory using ethical perspectives and social contract theory is a requirement. However, organisation may accept or comply with stakeholder norms, but they may also not wish to do so. Hypernorms (help to evaluate lower level norms that are applied to develop the roots of ethical acceptability) for stakeholders may be areas organisations may wish to avoid. Organisational norms will decide, which stakeholders are important and if data privacy is a top priority. Also do they have the resources to protect consumers (Maignan & Ferrell, 2004). Internal marketing or an internal marketing orientation culture cannot protect against cybersecurity issues if the organisation does not put the necessary resources in place and the nature of cybersecurity issues means resources must be sustained and developed and updated.

As stated earlier social contracts is an avenue to protect privacy but social contracts (all contracts) are based on fairness. Research on the harm an act or practice can cause, which gives rise to unfairness is document by Ohlhausen (2014). Unfairness could be applied to data privacy risk assessment and the prevention of data breaches (Ferrell, 2017). Frameworks suggested to reduce unfairness is justice theory and power responsibility equilibrium. The frameworks would be able to express fairness expectations (Martin & Murphy, 2017). Ferrell & Gresham (1985) developed a descriptive model to understanding ethical decisions in an organisation. Privacy decisions the model indicate individual values, and attitudes, organisational factors (impact of significant others) and opportunities (policies and compliance requirements). Specialised code of ethics for top financial and accounting officers improve the integrity of financial reporting (Ahluwalia et al, 2016). Specialised data privacy codes should help organisations develop a more effective data privacy culture that support ethical decisions. Importantly, is an understanding of the risks to the organisation and consumers and the development of effective cybersecurity (Ferrell, 2017).

All organisations should have a privacy crisis management or backup plan to minimise the risks from data breaches. The plan needs embedding in an ethic and compliance programme for data privacy and security. Those that think social contracts, values, policies and norms can be an effective deterrent in cybersecurity has not consider external risk, which requires collaboration with other organisations (Ferrell, 2017).

Possibly one the greatest risk is complacency by the organisation and the consumer in protecting their data and privacy. Akhter (2014) found the self-efficacy influenced privacy concerns negatively. Privacy concerns impacts the frequency of online transactions, reasons why organisations must protect consumer privacy and data. Ferrell (2017) suggest that marketing research should evolve to include frameworks to address and raise awareness of issues that influence cybersecurity. The impact on cybersecurity on brand image, erosion of consumer trust and organisations reputation. Cybersecurity is an external threat and is uncontrollable making trust difficult to secure. Internal marketing is not a panacea to cybersecurity issues, but is a stepping stone along with new techniques not yet developed.

## **MANAGEMENT IMPLICATIONS**

Cybersecurity issues are not a constant and will mutate, which will require organisation to adapt a flexible and nimble organisational structure. The organic structure would appear to be more adaptable to cybersecurity threats, but not all organisations can adapt such a structure due to the nature of the business. Firms that require a procedural approach to decision making may find it challenging to adopt an organic structure. Cybersecurity decision making requires an approach that is decentralise and autonomous approach to enable threats to be dealt with swiftly and in a timely manner. Cybersecurity threats as stated earlier is an organisational threat and internal marketing techniques must permeate across the organisation. Collaboration between different functions is an imperative and detection and prevention techniques shared continuously across the organisation. Sharing knowledge and information on cybersecurity internally solves the problem reactively. There is a need for collaboration across industries and other firms even competitors so that cybersecurity threats take on a proactive stance. This will enable organisations to alert others to new threats, sharing best practice improving internal marketing techniques by applying and developing models such as CSI, develop common training and development programmes and develop governance systems that integrate not only within the organisation, but across different organisations. Adoption of the collective approach to fighting cybersecurity means more resources are being marshalled and there is an economies of scale advantage for the participating organisations. More eyes watching cybersecurity activities helps to minimise the effect of social engineering, which is still the biggest threat to undermining cybersecurity governance. Bureaucratic organisation with the centralised approach to decision making may have to deploy autonomous cybersecurity groups that can make cybersecurity decisions proactively. These groups would have be organisation-wide and communications between them seamless to share information and update programmes and activities. The cybersecurity grouping in a bureaucratic organisation must have a market orientation approach, which is the glue to make organisations become cybersecurity proof.

## CONCLUSION

Cybersecurity cannot be departmentalised and communications localised. All staff must be engaged in cybersecurity activities and awareness training is not sufficient. Development training from training course to scenario activities to give the hands-on are necessary components to bring staff to the appropriate skillset to minimise the cybersecurity threat. Given the nature of cybersecurity requirements it will not be a cheap exercise, and hence the strategic imperative needs to be factored in. Cybersecurity implementation will incur many costs from ensuring there is an internal marketing culture of market orientation, awareness training to extensive training and development in cybersecurity. To ensure there is value for the organisation cybersecurity needs to be more prominent in organisations so it has an effective governance system and is embedded the corporate strategy process, thus it becomes part of the strategic decision making process. This will help to elevate its status to senior management, drive the necessary organisational and human resource management changes. Importantly, internal marketing alone cannot fix the cybersecurity threat, and the internal and external environments will be significant influencers. Cybersecurity safety is a multi-dimensional problem and requires many actors to come together to formulate an overarching strategy.

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# FINANCIAL BOOTSTRAPPING: SOURCE OF FUNDING FOR TECHNOLOGY BASED STARTUPS IN INDIA

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## ABSTRACT

*Traditional financing sources are not easily accessible in large amounts to entrepreneurs who are planning their own startup ventures. Financial bootstrapping may become a viable alternative for such people. This paper will focus on the techniques used in entrepreneurial startup firms to obtain forms of financing that are not the traditional debt loans or owner supplied capital. It aims to throw light on the inception and growth of financial bootstrapping in Indian context. For this purpose, three case studies pertaining to Indian startups, namely, Quick Heal, Quackquack.in and Fusion Charts, have been discussed and analyzed to identify the bootstrapping financing techniques used by each of them. This paper also helps to know as to how it can be used more effectively and efficiently as a source of finance for startup firms. The paper will then draw conclusions of where future research needs to head in order to get a better understanding of this important financing technique.*

**Keywords:** Bootstrapping, Innovation, Finance, Startups, Entrepreneurship.

## INTRODUCTION

Many entrepreneurs who are building ‘new economy’ businesses are choosing to bootstrap their startups either by using personal savings or reinvesting revenue earned, staying away from equity just like many in the old economy stay away from debt.

Bootstrapping describes a situation in which an entrepreneur starts a company with little capital, relying on money other than outside investments. An individual is said to be bootstrapping when he/she attempts to found and build a company from personal finances or the operating revenues of the new company. Bootstrapping also describes a procedure used to calculate the zero-coupon yield curve from market figures. Following are some of the bootstrapping techniques:

### 1. Owner’s Assets

The entrepreneurs have been using their own assets such as marketable securities, real estate, and income from other sources such as a spouse or other employment, the foregoing of salary withdrawal and the use of their homes to run the business. These techniques are usually the first place the entrepreneur looks to raise capital for some good reasons. The reasons include no dilution of ownership and maintained control of any future reimbursement at the entrepreneur’s discretion. The techniques do lend themselves to high risk due to the fact that the sources are personal and can be lost if the business fails.

### 2. Personal Borrowing

Many start-up businesses have limited or no access to traditional bank lending due to their small size, limited collateral, and unproven business plans or expertise. Banks and other lenders have not recognized most new businesses as unique entities because many or most new ventures have not been formed as corporations, the only business forms that have been recognized as unique entities. Most entrepreneurs resort to personal credit such as a second mortgage on their private homes, equity lines of credit, and use of personal credit cards.

### 3. Delaying Payables

A technique used for short term borrowing is taking a loan from the suppliers by delaying payments to them. The supplier sends the raw material or service to the entrepreneur who can use it to generate a sale. If the sale is converted to cash and the payment has not been made to the supplier, then the entrepreneur is in essence taking a short term loan out from the supplier. This may be due more to the entrepreneur being short on cash and stretching the bill payment as long as possible until cash comes in. Other payables may be taxes and utilities and in some cases even employee salaries.

### 4. Minimizing Receivables

In order for the payables delay to have a maximum effect, the entrepreneur needs to collect their payments from customers as soon as possible. This creates a maximum ‘float period’, which is the time between collection and payment. Some techniques that are used include targeting customers who have a history of paying quickly, obtaining prepayments, speed up invoicing processes, charge interest on overdue accounts, and selling the receivables to a third party.

### 5. Minimal Asset Cost

Techniques used here attempt to acquire the use of assets at a minimum cost to the entrepreneur. These may include the buying of used equipment, the use of temporary employees or sharing of employees with another business, using business incubators for office space and using government resources to assist with expertise and advice. The entrepreneur is mainly concerned with preserving as much capital as possible while still providing a high quality product or service.

### 6. Equipment Leasing

Equipment Leasing is a tool where the user pays for the usage of the assets but does not take ownership of the asset. By leasing, the lessor (entrepreneur) transfers the risks of equipment ownership to the leasing company and can therefore focus on using that equipment as a productive tool to grow the business.

## LITERATURE REVIEW

*John Stephens, Mariam Iskandarani (2006)* in their study of Entrepreneurial Bootstrapping Techniques discussed about financial bootstrapping as a viable alternative for those who are planning their own start-up ventures but do not have access to large amounts of traditional financing sources. The paper focuses on the techniques used in entrepreneurial start-up firms to obtain forms of financing that are not the traditional debt loans or owner supplied capital. The paper then draws conclusions of where future research needs to head in order to get a better understanding of this important financing technique. It became clear from their study that there are reasons beyond the control of the entrepreneur that necessitate creative financing techniques to be used. There has been some research in the field of entrepreneurial financing techniques, but more remains to be discovered. One industry that has garnered a lot of attention is the software industry. The next logical step for the study of bootstrap financing will be to further explore the techniques to make them better understood and recognized by researchers.

*Robin M. Schofield(2015)* in his paper Relationship between Bootstrap Financing, Number of Employees and Small Business Success stated that small business entrepreneurs face high failure rates, yet the success of local, state, and national economies relies on the success of small business. With a lack of capital commonly cited as a reason for failure, entrepreneurs must find ways to predict business survival. The purpose of this correlational study was to examine the efficacy of bootstrap financing and numbers of employees in predicting business survival, measured by the business age. The research question was answered by using a predictive correlational quantitative research method with a cross-sectional survey design. The central question was whether the amount of bootstrapping financing, measured by a bootstrapping survey, and numbers of employees significantly predicts firm success, measured by firm age in years. The results of the multiple linear regression analysis indicated that bootstrap use and number of employees did not significantly predict business survival. The majority of entrepreneurs surveyed used at least one method of bootstrap finance to support the business. Bootstrapping methods with the highest rate of use were offering



the same conditions of all customers, negotiating the best payment terms with suppliers, and buying used equipment over new equipment. The implications for positive social change include the potential to provide New Hampshire small business entrepreneurs with information for making informed financial decisions and creating financial models.

*Joakim Winborg (2015)* in his paper ‘The Potential of Bootstrapping Research for Advancing the Understanding of the Role of Resources in Corporate Entrepreneurship’ aims to introduce and use insights from research in the area of bootstrapping to provide implications for how to advance the research related to the role of resources in corporate entrepreneurship (entrepreneurship in established businesses). The paper provides implications for development in two areas referring to two different levels of analysis. First, the paper discusses potential contributions from bootstrapping research for developing the understanding of how corporate entrepreneurs/intrapreneurs mobilize resources (referring to the individual level of analysis). Second, the paper presents implications from bootstrapping research for advancing our understanding of the role of resources for businesses seeking to renew their strategy and more specifically seeking to renew the business model.

*Y. A. Afolabi, A. T. Odebunmi & J. T. Ayp-Oyebiyi (2018)* in their paper ‘Bootstrap Financing Techniques among Small Businesses in Osogbo Metropolis’ discovered that all that entrepreneurial training programs on bootstrapping should be organized for small business in Osogbo metropolis. This training becomes important, in the light of the fact, that bootstrapping approach has capability to close to an extent the financial gap, created by abysmal access to external financing by small business. Academic research has suggested that bootstrapping techniques can minimize risk because of the absence of the outside venture capital investors. The majority of the respondent don’t believe that information asymmetry aid bootstrap financing technique in Osogbo metropolis. The majority of the respondent don’t subscribe to the fact that high transaction cost affect bootstrap financing technique. The financing bootstrapping is a regular and widely used technique among the small business. More research is needed across levels of analysis and geographical settings. Bootstrap financing options exist at the individual firm, and industry levels. Further research into these areas will enable scholars to develop more views of the concept.

*Richard B. Carter & Howard Van Auken (2007)* in his paper ‘The Bootstrap Financing and Owners’ Perceptions of their Business Constraints and Opportunities’ found that owners who see themselves as having limited ability are more likely to use private owner financing techniques that tend to squeeze all available funds from the owner and those close to him/her. The results of this research can be used by consultants and agencies that assist small firms by acquainting owners with the myriad techniques for funding their companies as well as understanding the factors that often motivate the use of particular techniques. The results indicate that perceived risk is highly associated with owners’ assessment of the importance of bootstrap financing techniques. The intent of the survey was to study the relationship between the use of bootstrap financing – employing resources other than traditional financing to keep the enterprise afloat – and owners’ perceptions of their business constraints and opportunities. Bootstrap financing is important to small firms due to their lack of access to traditional capital markets. We also find that, while risk is the most pervasive motivating factor for bootstrap techniques in general, for owners who perceive themselves as having less ability. Private owner financing techniques are the most popular. Delaying payment techniques are most likely to be used when risk levels appear to be highest, while private owner financing is preferred for owners with lower levels of ability. Finally minimizing accounts receivable is preferred in business environments with the most opportunity. The study, however, demonstrates a direct relationship in that owners lacking in ability migrate toward bootstrap financing rather than traditional funding sources. The results in this paper provide evidence of the relationship between owners’ perceptions concerning the constraints and opportunities their businesses face and acquisition of bootstrap financing. The strengths of the study provide managerial implications that can be used by academics, practitioners, and consultants. Owners of small firms should recognize the important role and variety of bootstrap financing techniques. Bootstrap financing can either supplement or substitute for traditional sources of capital. The limitations of the study provide opportunity for future research.

## OBJECTIVES OF STUDY

1. To analyze the situation in which innovation occurs.
2. To identify the bootstrap financing techniques of startup enterprises in India.
3. To assess the most widely used bootstrapping technique in Indian context.
4. To explore the benefits of bootstrapping techniques used by Indian startups.

5. To determine the hurdles faced by the innovative entrepreneurs in India.

## METHODOLOGY

The aim of this study is to analyze the bootstrap financing techniques used by entrepreneurs for their startup companies with the help of three success stories in Indian context. It is necessary to examine the context in which bootstrapping techniques are employed. Since the context changes over time, this points to a longitudinal rather than a cross-sectional research design and one way in which this can be achieved is through the use of case study research. This can be particularly effective in showing how the context influences the decision-making process.

Case studies provide scope for a detailed in-depth examination of the funding process. In this study, three case studies are employed, each based on a technology-based start-up. The start-ups are QuickHeal, QuackQuack.in and FusionCharts. Each came about through the efforts of a single innovator. These are examples of what Jones and Conway (2004, p.87) term the heroic' model of innovation, where an individual develops an innovative new product and then builds a successful business around it. In this instance, the innovations were anti-virus software, online dating platform and data visualization products, and the respective innovators, Sanjay and Kailash Katkar, Ravi Mittal and Pallav Nadhani. Because they created highly successful businesses and over time became relatively well-known, there is a substantial amount of documentary material, in particular, personal interviews and business histories covering the individuals and their innovations.

## CASE STUDIES

### Case Study I (Quick Heal)

From a chawl in Pune to building Quick Heal, Sanjay Katkar's journey to being the one of the most successful tech entrepreneurs of India. Sanjay's father had enrolled Sanjay and his siblings in an English medium school despite his own lack of education. His elder brother Kailash had quit studies after failing the ninth class and started helping in the household repairing electronics. He opened his own hardware repair shop and was making a comfortable living. He noticed the rising popularity of computers and shifted his focus to these over other machines. He started a workshop for computer repairs in 1990 and eventually won the annual maintenance contract for New India Insurance.

Sanjay developed an interest in computers and programming in the second year of college with C Language. With limited time allotted for the subject, Sanjay started working on computers that his brother took on to repair at his shop. Sanjay (who was then studying for his MCS degree) observed that the majority of requests were for computers that had been virus-infected. The duo then came up with the idea of a security software company Quick Heal and released their first Quick Heal Antivirus for DOS in 1995.

The first tool Sanjay created was for the Michelangelo virus. Kailash started distributing those tools for free to his customers. Having received a positive response, he suggested that Sanjay create an anti-virus software out of those tools. Kailash then approached hardware vendors to educate them on how to sell this software.

Sanjay says, —At the time, we were simultaneously running the hardware business, which was our only source of cash. Kailash took on the responsibility of marketing the products, and I used to take care of the R&D. To gain an edge over the competition in the market, I started creating differentiators in our products. In addition to big MNCs, seven to eight big Indian companies were selling anti-virus products. Sanjay interned at industrial automation tool company Jopasana Software for his masters' project and while he was offered a job thereafter, Kailash asked Sanjay to design an anti-virus based on all the tools developed by him. This was the genesis of Quick Heal in 1993-94.

Sanjay burned the midnight oil working on packaging the anti-virus during his internship and Quick Heal's first version for MS-DOS was released in 1995. It was in a floppy disk and had 18-20 anti-viruses for some of the most common viruses infecting Indian computers. For first two years, nobody paid for Quick Heal. Sanjay says, —Piracy was huge in India then. People (with desktops at home) weren't buying software, they just got pirated

software. We couldn't convince people to buy anti-virus. Kailash and other hardware repair workshops used Quick Heal extensively and sold it to troubled customers with a guarantee from Quick Heal.

For the first five years, Quick Heal was present only in Pune, but that did not turn out successful. The duo could not afford an office space in Pune. Lack of interest from banks and investors led them to take a hard call to shut down the business in 1999. However, a series of discussions with friends gave them the idea to market the product aggressively. Kailash then took out a half-page advertisement in Times of India and started focusing more on marketing in a bid to expand the business.

From 2002 to 2010, Quick Heal expanded from Pune to other major cities. In 2010, the anti-virus security company received an investment of Rs. 60 crores from Sequoia Capital. The fund was utilised to open new branches in Tamil Nadu followed by offices in Japan, the US, Africa and the UAE in a span of two years. Today, it has 33 branches across India, and customers from approximately 80 countries.

## Case Study II (QuackQuack.in)

QuackQuack is a dating platform for Indians (web and app) which launched almost 8 years ago and has a total user base of 4 million currently. Ravi, the founder started working at the age of sixteen, managing his father's battery manufacturing business. Eventually, his social circle shrunk, forcing him to look out for friends or find a date online, in 2010. To his surprise, there were hardly any dating platforms dedicated to Indians at that time. Most of the people he knew would either flock to Facebook or Shaadi.com to find a date. That was his Eureka moment. He rallied his energies behind building a dating platform for singles in India. He was supported by his parents to follow his dreams and rented a 2BHK apartment, and hired a small development team in-house, to build QuackQuack.in. Before starting QuackQuack.in Ravi put in dummy advertisements on Google ads and Facebook to test whether the market was ready for such a venture. To his surprise, he found 20 signups to every 100 clicks on the advertisement. This was a clear and positive indicator.

Presently, with a 15-member team consisting of developers, designers, UI / UX guys, moderators, and a digital marketing team, the venture seems to be performing fairly decently in the market. By the end of 2014 and there was a launch of apps like TrulyMadly, Woo, Aisle, iCrushiFlush, Thrill (now Frivil) and the frenzy of funding started and that helped all of them gather massive coverages while they started to spend huge money on branding and acquiring userbase on VC money. Quackquack too grew quickly with almost 1 million plus users joining us during that time. To note, funded competitors scaled up pretty fast. However, Quackquack stands against these funded startups and is *leading as a cockroach startup*.

*Growth:* QuackQuack's growth in terms of Android app installs / signups is just behind TrulyMadly, while all others lag behind despite all the branding and user acquisition, considering Android is the main source of user growth for all dating apps. And QuackQuack's main traffic doesn't even come from Android app.

*Revenue:* While QuackQuack is doing both, competitors are still figuring out their model.

- a. QuackQuack's revenue for financial year ending 14–15 was INR 2.2 Cr
- b. Woo has recently started monetising with a freemium subscription model.
- c. The revenue in 14–15 was approx. 25x of Aisle's revenue then (data taken from MCA portal)
- e. TrulyMadly is trying to monetise with ads.
- f. The app ranks higher than iCrushiFlush in Top Grossing—Lifestyle apps where ranking is based on Play Store in-app purchases. To be frank, not many people use Play Store in-app purchases and it's not a good sign.
- g. FRIVIL is recently started monetising with in-app purchases.

*Active Users:*

- a. QuackQuack's monthly active user-base is quite close to TrulyMadly as we estimate.
  - b. All other apps like iCrushiFlush, Woo, Aisle, Frivil have very small active userbase.
- In terms of growth, revenue and active user-base, Quackquack has done a fair job despite being bootstrapped / self-funded and are already ahead compared to many funded startups in this space.

## Case Study III (Fusion Charts)

Fusion Charts, now part of InfoSoft Global (P) Ltd, is a privately held software provider of data visualization products (JavaScript Charts, Maps, Widgets and Dashboards) which help in converting boring data into beautiful, interactive charts.

Pallav Nadhani at the tender age of 16 started up the company in 2002 when he found himself dissatisfied with Microsoft Excel's charting capabilities while using the program to complete high school class assignments. Pallav had started coding programs for his father's web design company in 2000 because they did not have many employees. He realized that his dad was using bad Excel charts for his applications and wanted to get rid of boring Excel.

The program that he coded could create interesting charts and graphs. There was a site, which paid him handsomely for writing articles about innovation, about a dollar a word. So, he wrote an article about what he had built, published it and got a lot of feedback. Eventually people came to use his charts. Pallav did it free for a few guys, after which he realized it was time consuming, so he started asking for payment. He then realized instead of doing one-on-ones, he could build a product. His original intent was to make pocket money, but as customers grew, his dad and him formed a proprietorship in 2005. His father took care of operations, finance, investments, sales, administration and legal requirements. His job was technology, product and setting the direction for the company as a whole. This is why, he calls himself an accidental entrepreneur. Sanket and his brother used to look after marketing at Fusion Charts until some while ago when he moved out and concentrated on efforts like their book- Not Just Another Pie in the Sky.

The seed capital was the computer that his dad had given him and the \$1,500 he had earned by writing articles on the web. He wrote a few articles to gain pocket money. One of the articles was about how to create a new animated charting component. People loved it and before the product launched, they were already willing to give him \$100 cheques for customization.

Fusion Charts has mainly hired via referrals and continues to do so. It maintains a very hands-on environment wherein everyone from the director to the newest recruit gets their hands dirty. Sanket surely has a good sign of a thriving company. This also emanates from the fact that Pallav has bootstrapped the company. Building it from scratch, the company hasn't raised a single penny of external money and has been highly profitable.

Fusion Charts follows a licensing model to sell the software. According to Pallav, in the US, the company has closed \$500,000 deals just over the phone, without even having to meet customers. He was of the belief that Indians don't pay for software. Their focus is to cater to the global market. Fusion Charts helps more than 23,000 enterprises and five lakh customers across 118 countries build JavaScript/HTML5 data visualizations for their web and mobile applications. The startup claims that about 85 percent of their clients are from Fortune 500 companies. The company now boasts of more than 65 employees with an annual turnover nearing \$10 million.

## CASE ANALYSIS

All three cases are examples of technology-based start-ups and in each instance, financial bootstrapping techniques are much in evidence in the early stages of the venture. The bootstrapping techniques used were the same or similar to those found in earlier studies. Table 1 gives an overview of the bootstrapping techniques found in the three case studies.

**Table 1: Bootstrapping Techniques.**

Bootstrapping Techniques	Quick Heal	Quackquack.In	Fusion Charts
Owner's Assets			*
Personal Borrowings			
'Free' or low cost labour	*	*	*
Deals with Customers	*	*	*
Special Deals for Space	*	*	*
Special Relationships	*	*	*

Customised Solution		*	*
Minimum Assets Cost	*	*	*
Non-Equity Funds			
Others	*	*	

Deals with customers, as we can see, is something that all three entrepreneurs made extensive use of, mainly in the form of offering first prototypes of their products free of cost in order to create demand. Free or low cost labour on the other hand was much in evidence in all three cases as well, though the sources of such labour were varied. All three innovators used their family members as a source of free labour. In the case of both, QuackQuack and Fusion Charts, the father played a significant role in providing the space and equipments for carrying out the operations. In addition, they also helped in managing the legal and administrative matters. In the case of Quick Heal, the brother played a key role in taking the business forward.

Finally, the category of other methods includes a few additional forms of bootstrapping. In case of Quick Heal, Kailash approached hardware vendors to educate them on how to sell this software. In addition, to gain an edge over the competition in the market, I started creating differentiators in our products. Moreover, when the company was not performing very well, they marketed the product aggressively. Quackquack.in, on the other hand, used dummy advertising through google ads and Facebook to check the market demand of their product before its actual launch. They even introduced a freemium subscription model for revenue generation.

## CONCLUSION

It is clear from the literature that there are reasons beyond the control of the entrepreneurs that necessitate creative financing techniques to be used. Software industry is one such industry that has garnered a lot of attention when it comes to financial bootstrapping. This study provides further evidence that financial bootstrapping techniques are an essential feature of business start-ups, particularly ones based around technological innovation. The cases not only show that many of the bootstrapping techniques identified in earlier survey research are widely used in practice, but they also show in some detail how and why they are used. In so doing, they shed some light on what Harrison et al. (2004) describe as the process dynamics' surrounding the use of bootstrapping techniques. However, perhaps the most significant contribution of this study is the insight that it provides into the nature and importance of the personal networks, comprising friends, colleagues and other contacts, which play a crucial role in providing the innovator with access to many of the bootstrapping techniques. The case studies show that these are not confined to special relationships', for other bootstrapping techniques, notably amongst others, free/low cost labour, were also dependent on personal networks. Burt (1992) and others (Sørheim, 2003) have shown how these networks constitute social capital through which individuals access resources. The cases in turn show that this is very much the case with start-ups based on innovation, where innovators' social capital is a key feature of their ability to access financial resources based on bootstrapping technique. The study of bootstrap financing needs to be further explored so that the techniques become better understood and recognized by researchers.

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# A STUDY ON BRAND CONTRIBUTION TO EARNINGS OR REVENUES

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## ABSTRACT

*A corporate brand can add value to the company's product policy which is beneficial to both the corporate and its individual products. Several multinationals are aware of the importance of their names and are trying to establish and create a strong link between their corporate brand and product brand. The study examines the importance of brand contribution to sales and in turn the factors which affect the choice of a brand by studying consumer attitude through various malls and local stores across the city of New Delhi in India.*

**Keywords:** corporate brand, brand contribution, brand revenue, store image, purchase intention.

## INTRODUCTION

AT Kearney's annual Global Retail Development Index (GRDI) places India at the top position for the third year in a row as the most attractive market for retail investment. The retail industry in India is estimated to garner business to the level of \$640 billion by 2015. But, this transition is not going to happen in a smooth way, every change brings along with it challenges and at the moment there is a tug of war between the Indian organized and unorganized retail sector. Emerging markets like that of India are too juicy to be ignored. It carries with itself the promise of retail expansion opportunities, huge customer base, right competitive environment and a generation of young and able professionals who are willing to pay a price for their comfort. Over the past 10 years the Indian retail market has grown at the rate of 10% per annum and KPMG analysis points out that by 2015, 55% of Indian population will be under 20 years of age, strengthening the logical inference that the markets are more than ready for further opportunities. Indian government foresees the possibility of revenue generation by this sector and slowly but steadily it is moving towards full throttled participation by foreign retailers.

The motivation behind this study was the fact that store brand sales will continue to gain share as retailers fine tune their approaches to meeting consumer needs (Walker, 1991). This implies that merchandise selection is very important as it will affect store image. The quality of products offered by a retailer influences customer patronage behaviors (Dodds, Monroe, and Grewal, 1991). Brand name has been shown to be a critical cue for customer perceptions of product quality in a number of studies (e.g., Dawar and Parker, 1994; Dodds, Monroe, and Grewal, 1991). The role of merchandise and brand names that retailers carry are important for a better understanding of store patronage decisions.

Government has the power to formulate policies and like in other countries it should play an important role in modernizing the retail sector and thus safeguard its existence and improve its competitiveness. However, the exact role of the government is not clear, as in should it formulate policies for increasing participation in organized retail by curbing the protection given to foreign retailers or vice versa. In this context it is highly imperative to develop an insight into the same by studying the attitude and pattern of the consumers buying behaviour.

# LITERATURE REVIEW

It is reported that a corporate brand can add value to the company's product policy and linking corporate and product brands will be beneficial to both the corporate and its individual products. Several multinationals have become aware of the importance of their names and are trying to establish and create a strong link between their corporate brand and product brand (Uehling, 2000). However, although there are many theories that have been advanced explaining how customers evaluate and select a particular product (Bettman, 1970; de Chernatony and Dall'Omo Riley, 1998; Jamal and Goode, 2001; Kim and Chung, 1997; Lee and Ganesh, 1999; Low and Lamb, 2000; Mitchell and Olson, 1981; Muthukrishnan and Kardes, 2001; Woodside and Clokey, 1974), most of these attempts have only partially examined the impact of corporate branding on consumers product evaluation.

Price and special promotions have been used to attract consumers to a retail store (i.e., providing greater value via the discount) and generate an increased level of store traffic (Grewal, Monroe, and Krishnan, 1998; Lichtenstein and Bearden, 1989). However, Doug Raymond, President and CEO of Retail Advertising & Marketing argues that retailers cannot depend on these price promotions to attract customers on a regular basis. According to the trade publications, retailer's use of price promotions to attract customers and the desire to maintain margins have always been at odds with each other. The conflict has become more acute as price promotions have failed to build sales (Progressive Grocer, 1992). Additionally, while price discounting may generate traffic in a retail store, such discounting may have negative effects on the brand's quality and internal reference prices. Price discounting may even hurt a store's overall image. These issues warrant further investigation.

As markets become more fragmented, stores continually adjust their positioning strategies, altering their image, in order to remain competitive. For instance, millions of dollars are spent each year by retailers designing, building and refurbishing stores. This is, at least in part, because they want to portray an image that is appealing to their current and potential customers. Darden, Erden and Darden (1983) found that consumers' beliefs about the physical attractiveness of a store had a high correlation with patronage intentions. For example, to improve its competitive position against Wal-Mart, K-Mart engaged in an image improvement strategy that emphasized the store's atmosphere (Discount Store News, 1990).

The store's name is an information-rich cue to its image. Mention of the store's name thus evokes a vivid store image in consumers' minds. Zimmer and Golden (1988) found that consumers sometimes used store names to describe a prototypical store (e.g., "Like Sears"). The store name represents a store's abstract, gestalt nature, and is a form of the category-based processing perspective of store image suggested by Keaveney and Hunt (1992). We argue that, as a brand's equity increases with the strength of its brand name, so a store's image will be positively related to its store name. Therefore, as the strength of a brand name increases, it contributes more to the revenue by way of increased sales.

Brand name is a commonly used extrinsic cue to infer and/or maintain quality perceptions and can represent an aggregate of information about a product (Richardson, Dick, and Jain, 1994). Della Bitta, Monroe and McGinnis (1981) proposed that a strong brand name helps to control or stabilize the quality perceptions of a branded product even when its price is discounted. In a more recent study, Dodds et al. (1991) also found empirical support for the positive effect of brand name on quality perceptions.

Brand name is also expected to positively influence buyers' internal reference prices. Monroe, Grewal, and Compeau (1991) noted that people form an internal reference price scale based on past experience with stimuli. One component of past experience would be recognition of a brand name. Thus, even when consumers have not had direct experience with a product, exposure to the brand name gives them a certain degree of familiarity.

Olshavsky (1985) has noted that the quality of the brand could serve as a cue to the image of the store. This suggests that consumers who view brands favorably will have a positive image of the store. This argument has some empirical support. Baker, Grewal and Parasuraman (1994) found that as merchandise quality increased so did store image. Mazursky and Jacoby (1986) discovered that a store's image can be improved by association with strong brands while at the same time a strong store image can be damaged by connection with a poorly perceived brand.



Store image has a direct, positive relationship with purchase intention. This result has important implications for retail managers and manufacturers alike. Consumers' intentions to purchase a product can be influenced by the store in which that product is sold above and beyond the value they perceive the product itself offers. Thus, consumers may derive some amount of "added value" from the image of the store. This means that manufacturers should be especially careful to choose retailers whose image is consistent with their brand's positioning. Retailers, on the other hand, may be able to leverage their image in negotiations with manufacturers, or in store advertising to attract more customers. For example, a store's advertising could stress a pleasant shopping experience.

## RESEARCH METHODOLOGY

Attitudes are likes and dislikes. Gordon W Allport defined an attitude to be a mental and neural state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related. Later on, Milton Rokeach defined it as a relatively enduring organisation of beliefs around an object or situation predisposing a person to respond in some preferential manner. Attitudes are, thus, said to have a knowledge/belief (cognitive) component, an emotional or affective component and a connotative or behavioral component. Having an idea or belief about the object is the minimum condition for having an attitude with regard to it. As hypothetical constructs, attitudes cannot be measured directly. Any attempt to assess them can only be inferential in nature. Hence, taking lead from the pointers above the consumers were administered with a questionnaire, on the basis of which analysis regarding their shift in attitude was made.

A qualitative study comprising four focus group discussions and two in-depth interviews were conducted to identify the attributes about which the study shall revolve. The participants comprised those who were the key decision makers in a household in purchasing activities. The generated items with Eigen value of more than one were included resulting in 20 attributes. Each scale item comprised five opinions based on five point Likert scale in which each attribute was ranked from 1 to 5. Here, 1 represents strongly disagree and 5 represents strongly agree. The primary data was collected through a well-structured questionnaire. The questionnaire was also translated from English to Hindi, the principal language of Delhi. It was pre-tested to ensure that the wording, sequencing of questions, length and range of scale were appropriate. Sometimes it became difficult for the respondents to answer the questionnaire due to low levels of literacy. In these situations, the administrator of the questionnaire came to help and guidance ensuring that the respondent is not influenced in any way.

This study aims at assessing the factors that influence the attitude of consumers when buying retail products. This study was conducted in New Delhi based on five point Likert scale in which each attribute was ranked from 1 to 5. These attributes have been the result of four focus group interviews and the representatives of these groups have been customers who are majorly involved in purchasing activities and are the core decision makers in a household. The area of New Delhi was divided into four zones: North, South, East and West. Judgment sampling technique was used in getting the questionnaires filled from 500 consumers, 250 consumers were contacted at various stores and the remaining at various malls across the city. At times the malls were in far flung areas and the local stores were hard to locate. In such cases the nearest visible store was considered for questioning. Before administering the questionnaire, the meaning of the scale was explained to the respondents. A response rate of 72 per cent was obtained resulting in 360 complete questionnaires.

## RESULTS AND DISCUSSIONS

Factor analysis technique was employed to examine the structure of relationship among variables influencing perceived attitude of a buyer. Prior to running the factor analysis, the (KMO) Kaiser-Meyer-Olkin measure of sampling adequacy and the Bartlett's test of sphericity was performed. The generated score of KMO was of .87 and highly significant Bartlett's test of sphericity supported the appropriateness of using factor analysis to explore the underlying structure of attitude of consumers towards unorganized retailing. An "Eigen Value of greater than 1" criterion was employed for determining the number of factors. In order to obtain more interpretable results solution, Varimax rotation was used to rotate the solution. This caused the loading to be distributed among the selected factors making it easier to interpret results. As a result, the factor loadings of more than .5 were considered as significant. As

shown in Table1 the factor analysis of the 20 item scale on the basis of principal component extraction by using Varimax rotation converged in fourteen iterations and resulted in four homogeneous sub scales with Eigen Values of 4.212, 3.612, and 2.314. After rotation, the total variance came out to be 71.115 per cent. The communalities for the same after extraction ranged from 0.465 to 0.726. The factors with higher loadings were named as convenience, personal relations, availability of credit and quick billing. SPSS version 17 software was used for performing all statistical analysis.

The first subscale with Cronbach alpha 0.91 included eight items related to ‘brand image’: feeling of empowerment, sense of good decision making, satisfaction with purchase, wholesome deal, sense of identification with the brand, reflection of self, differs with other brands, morally and ethically upright. The second subscale ‘perceived quality with Cronbach alpha of 0.90 comprised five items related to: reliability of product, product quality, product durability, product dependability, would recommend product to all. The third subscale ‘perceived value’ with Cronbach alpha 0.85 included five items: the payment appears to be a bargain, the price is less than the expected, looks good as compared to other retailers, adds style and glamour to the collection. The fourth subscale with Cronbach alpha 0.83 contained two items related to service rendered: personalized Interaction, knowledgeable and helpful salespeople. The scale was tested for reliability. It had an overall Cronbach’s alpha value of 0.95 that ranged from 0.712 to 0.912 for the subscales. The reliability was highest for ‘brand image’ (0.91) and lowest for ‘perceived value’ (0.85). The overall mean score was 1.765.

**Table 1: Factor Analysis of the Instrument.**

Items	Components/Factors					Communalities after extraction
	1	2	3	4	5	
Brand Image						
Feeling of empowerment	<b>0.465</b>	0.411	0.455	0.132	0.011	0.724
Sense of good decision making	<b>0.552</b>	0.465	0.442	0.315	0.017	0.718
Satisfaction with purchase	<b>0.652</b>	0.452	0.256	0.135	0.149	0.654
Wholesome deal	<b>0.595</b>	0.358	0.245	0.133	-0.031	0.723
Sense of identification with the brand	<b>0.758</b>	0.287	0.154	0.254	0.112	0.721
Reflection of self	<b>0.725</b>	0.526	0.487	0.124	0.312	0.696
Differs with other brands	<b>0.456</b>	0.357	0.457	0.214	0.117	0.715
Morally and ethically upright	<b>0.455</b>	0.254	0.547	0.114	0.114	0.765
Perceived Quality						
Reliability of product	0.212	<b>0.587</b>	0.354	0.354	0.115	0.719
Product quality	0.124	<b>0.654</b>	0.585	0.215	0.167	0.709
Product durability	0.254	<b>0.654</b>	0.457	0.457	0.478	0.714
Product dependability	0.247	<b>0.753</b>	0.152	0.241	0.101	0.717
Would recommend product to all						0.722
Perceived Value						
The payment appears to be a bargain	0.115	0.475	<b>0.654</b>	0.154	0.112	0.724
The price is less than the expected	0.024	0.457	<b>0.754</b>	0.631	0.241	0.709
Looks good as compared to other retailers	0.116	0.245	<b>0.789</b>	0.487	0.354	0.726
Adds style and glamour to the collection	0.374	0.245	<b>0.758</b>	0.214	0.113	0.721
Service Rendered						
Personalized Interaction	0.457	0.568	0.212	<b>0.785</b>	0.147	0.654
Knowledgeable and helpful salespeople	0.114	0.241	0.475	<b>0.654</b>	0.214	0.711
Percentage variance explained by factor after rotation	17.113	16.112	15.142	<b>14.214</b>	8.534	
Extraction Method: Principal Component Analysis with four factor extraction .Rotation Method: Varimax with Kaiser Normalization. Rotation converged in fourteen iterations						

## Subgroup Analysis

The demographic profile of the respondents is as shown in Table 2.

**Table 2: Demographic profile of respondents.**

Variables		Total Number (N= 360)	%
Gender	Male	270	75
	Female	90	25
Literacy	Literate	234	65
	Illiterate	126	35
Income per month	≤ 1000	36	10
	1000-3000	126	35
	≥ 3000	198	55
Age	≤ 30	162	45
	≥ 30	198	55

1 US dollar = Rs. 65 approximately

To find out as to which demographic features contribute maximum to store visits, the intention of the consumers to repeat visit was regressed against overall score on attitude in order to determine leading factors contributing to this switch and preference to unorganized retail format. For this purpose, linear regression model was employed to study the relationship between the intention to purchase from stores (dependent variable) and the components of consumer attitude (independent variables). The findings indicate that the socio-economic profile of the respondents and other related factors was significantly associated with the intention to purchase from stores (Table 3).

**Table 3: Components of Consumer Attitude that Impact Purchases from Stores.**

Components of Consumer Attitude that Impact Purchases from Stores							
	Constant			BI	PQ	PV	SR
	a	95% CI		B	B	B	B
		Lower	Upper				
Overall	0.668	0.625	0.712	<b>0.25</b>	<b>0.154</b>	-0.012	<b>0.261</b>
Female Gender	0.833	0.702	0.965	<b>0.14</b>	<b>0.214</b>	-0.012	<b>0.021</b>
Male Gender	0.547	0.531	0.564	<b>0.1</b>	<b>0.256</b>	0.025	-0.012
Age<30 years	0.664	0.587	0.741	0.02	<b>0.154</b>	<b>0.251</b>	-0.012
Age>30 years	0.541	0.541	0.542	<b>0.23</b>	<b>0.254</b>	-0.012	0.014
Mall Preference	0.714	0.712	0.716	<b>0.46</b>	<b>0.314</b>	-0.011	<b>0.121</b>
Local Store Preference	0.441	0.425	0.458	0	0.012	0.002	<b>0.321</b>
Income ≤ 1000	0.639	0.524	0.754	0	<b>0.211</b>	<b>0.314</b>	-0.003
1001-3000	0.576	0.568	0.584	<b>0.02</b>	<b>0.112</b>	<b>0.211</b>	-0.101
>3000	0.621	0.589	0.654	<b>0.46</b>	0.352	0.054	0.251
Uneducated	0.611	0.568	0.654	0.1	0.011	<b>0.212</b>	-0.021
Upto class 8	0.697	0.574	0.821	<b>0.25</b>	<b>0.214</b>	0.022	0.202
Above class 8	0.62	0.584	0.657	<b>0.35</b>	<b>0.213</b>	-0.215	<b>0.112</b>

**Statistically significant  
at 0.05 level**

For most of the variables, 'brand image' and 'perceived quality' were seen to be significantly associated with the intention to visit a particular format of a store. It was observed that the two above mentioned factors significantly impacted the outcome among men and among women it was 'brand image', 'perceived quality' and 'service rendered'. The finding that among < 30 year age group, it is the 'perceived quality' and 'perceived value' that impacts the outcome, implies that they are most important factors with no association being shown with any of the other components. Interestingly, for the age group of >30 years, the most significant factors were 'brand image' and 'perceived quality', thus implying that when consumers of a product are well settled, they already have their preferences made and simply look for stores which would make that brand available to them and serve the purpose of providing good with quality. The outcome showed varying association with the components of store preference for different income groups. The factors 'perceived quality' and 'perceived value' mattered most for the respondents with income less than 1000. For those whose income was >3000, the dimension of 'brand image' was of utmost importance. For illiterates, only 'perceived value' is significant but as the level of education increases, other variables such as 'brand image', 'perceived quality' and 'services rendered' stand out to be statistically significant.

## **THEORETICAL AND MANAGERIAL IMPLICATIONS**

The study examines the importance of brand contribution to sales and in turn the factors which affect the choice of a brand by studying consumer attitude through various malls and local stores across the city of New Delhi in India by using a 20-item scale. These factors had emerged after focus group discussions and in-depth interviews. The scale tested well for reliability with an overall Cronbach's alpha value of 0.95.

The current study contributes to the understanding of factors influencing consumer attitude, adequate consideration has been given to critically analyze the factors influencing the shopping intention and attitude of the consumers when they make a buying decision in retail stores. A retailer must understand and know in detail, various factors that led to shopping intention and attitude of the consumers. Keeping this objective in mind, a threadbare analysis has been done, the result of which, in turn, will completely equip the retailers to understand and comprehend the shopping intention and attitude of the consumers.

The findings of the study regarding attitude of customers regarding purchases is as follows:

- With increase in earning capacity of households (working couples), there was an increased focus on brand image and perceived quality.
- The most interesting revelation was that consumers were very satisfied with the kind of identification they developed with the brand
- Women are becoming increasingly conscious towards brand image, wherein they identify with the purchases made and consider themselves responsible in the decision making process
- Consumers under the age of 30 gave huge impetus to perceived value and those above 30 gave considerable importance to perceived quality present in goods and services.

However, all said and done, the Indian consumer is coming of age and is exploring the area of online shopping. According to AT Kearney Retail E-commerce Index published in July 2012, despite the buzz around the scope of E-commerce in India, the country does not feature in the top ten emerging markets in this category. At the moment, this sector is in a flux. So, it is actually a very good time for the Indian store owners to experiment and capture the market by involving their progenies and making the use of technology. Online facility at stores will help them reap the profits of this untapped segment and also despite the glitches; e-tailing is here to stay. The study is however limited to certain areas of Delhi. Therefore, it is suggested that similar studies be carried out in other urban areas of the country and this should include tier 2 and tier 3 cities as well. Further, researches could be conducted on modernization and e-tailing in stores.

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# DO RELATED PARTY TRANSACTIONS AFFECT AUDITOR INDEPENDENCE?

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## ABSTRACT

*This paper examines whether related party transactions (hereafter, RPTs) affect audit opinion shopping. RPTs are generally diverse and complex, and are seen as increasing audit risk, which increase the probability of receiving modified audit opinions (hereafter, MAOs). Since issuing a MAO leads firms to face greater regulator's restrictions, firms with more RPTs may have greater incentives to press audit firms to switch engagement partners to obtain more favorable opinions. Using a sample of Chinese listed firms, we find that partner-level opinion shopping increases as RPTs increase. In addition, we find that this positive association is more prevalent in non-operating RPTs. Policymakers may consider RPTs as an essential factor in designing monitoring mechanisms of auditor independence.*

**Keywords:** Opinion shopping, Partner switch, Auditor Independence, Related party transactions, Corporate governance.

## INTRODUCTION

The purpose of this study is to investigate the association between related party transactions (hereafter, RPTs) and partner-level audit opinion shopping in the Chinese context. RPTs are commonly defined as transactions between a company and its related entities (e.g., subsidiaries, affiliates, principal owners, directors, and officers). While RPTs may sometimes be initiated for genuine business purposes, they are often viewed as a tool for financial fraud and for minority shareholder expropriation (Kohlbeck and Mayhew, 2010; Ryngaert and Thomas, 2012). Auditors play an essential role in the reporting of RPTs and monitoring and curbing abusive transactions with related parties (Bennouri et al., 2015). In China, RPTs are quite prevalent (Jiang and Wong, 2010), and auditors perceive RPTs as an audit risk factor (Habib et al., 2015) which is associated with the issuance of modified audit opinions (hereafter, MAOs) (DeFond et al., 1999; Francis and Krishnam, 1999). Partner-level audit opinion shopping refers to firms successfully pressuring their audit firms to substitute an engagement partner with a more lenient one to obtain more favorable audit opinions. Recent research finds that Chinese listed firms can succeed in partner-level opinion shopping (Chen et al., 2016). Further, MAOs can result in costly actions against Chinese listed firms, such as delisting, suspension of trading, and negative market reaction (Chen et al., 2000; Haw et al., 2003). While there is a growing body of research on the consequences of RPTs from the firm performance, earnings, and auditing quality perspectives (e.g., Jian and Wong, 2010; Bennouri et al., 2015; Habib et al., 2015), there is no evidence on whether RPTs result in partner-level opinion shopping. Therefore, this study investigates whether firms conducting more RPTs have greater incentives to compel their audit firm to switch its engagement partner to obtain more favorable opinions.

RPTs can be value-destroying if they are used as a means for managerial opportunism. Controlling owners of listed companies frequently engage in RPTs to gain private benefits at the expense of minority shareholders (Cheung et al., 2009). Such transactions are accompanied by significantly less information disclosure than those that aim to ameliorate efficiency (Cheung et al., 2009), and are also frequently used for earnings management (Aharony et al., 2010). The literature also documents a negative association between the use of RPTs and firm value (e.g., Berkman

et al., 2009; Jiang et al., 2010; Kohlbeck and Mayhew, 2010). On the other hand, RPTs can function as normal business activities that fulfill corporate economic needs (Gordon and Henry, 2005), and RPTs among companies can optimize internal resource allocation, reduce transaction costs (Shin and Park, 1999), and improve performance (Khanna and Palepu, 2000; Wong et al., 2015). However, empirical evidence regarding such efficiency-enhancing RPTs is relatively rare.

In China, auditors take charge of identifying, assessing, and handling the risks of their clients' misreporting of activities related to RPTs (China CPA Auditing Standards no. 1323, Chinese Institute of Certified Public Accountants (CICPA), issued in 2006). Most Chinese listed companies frequently construct complex RPTs with their related entities (Lo et al., 2010). To untangle these complex transactions, auditors perceive a significant audit risk and thus need to devote greater effort to the auditing process (Habib et al., 2015). An increase in audit risk also leads to an increase in the proportion of firms that receive MAOs (DeFond et al., 1999; Francis and Krishnan, 1999).

In China, receiving an MAO imposes costs on a firm such as delisting risk and equity financing supervision, which can curb managerial opportunistic behavior. Prior research (e.g., Chan et al., 2012; Gu et al., 2013) indicates that the China market has heterogeneous audit quality, either across firms and/or across partners within the same firm, which enables firms to identify more lenient partners, and existing institutions to facilitate the switch of interest. If RPTs potentially increase the probability of receiving an MAO, firms conducting more RPTs may have greater incentives to engage in partner-level opinion shopping. Therefore, we expect to observe a positive association between RPTs and partner-level opinion shopping.

Using data from all the A-share firms listed on the Shanghai and Shenzhen Stock Exchanges from 2002 to 2015. The results show that RPTs are positively associated with partner-level opinion shopping. This finding suggests that RPTs provide insiders with incentives to influence an audit firm's decision to switch its engagement partner to obtain more favorable audit opinions. This is in line with the argument that RPTs can be indicative of weaknesses in corporate governance. The additional analysis indicates that the positive association between RPTs and successful opinion shopping is more pronounced for firms engaging in more non-operating RPTs. This is consistent with the opportunistic use of non-operating RPTs.

This study makes several contributions. First, The recent work of Chen et al. (2016), studying the case of China, provides initial evidence of opinion-shopping at the partner level. This study extends their research by showing that RPTs provide firms with more incentives to engage in partner-level opinion shopping. Second, previous archival studies (e.g., Chen et al., 2008; Chi et al., 2009; Carcello and Li, 2013; Gul et al., 2013) using audit partner data have examined the determinants that may lead to variation in audit quality across audit partners. This work adds this stream of literature and show that RPTs can result in heterogeneous audit quality across partners within the same audit firm. Third, this study contributes to the literature on corporate governance and RPTs in China. Prior research on RPTs largely concludes that Chinese companies engage in RPTs to expropriate firm resources and, therefore, RPTs reduce firm performance and earnings quality (Gordon and Henry, 2005; Zhu and Zhu, 2012), and increase audit fees (Habib et al., 2015). External auditors must cope with complex RPTs and are more likely to spend greater effort in rendering an appropriate audit opinion. There has been little research to date, however, that examines how firms influence an audit firm's partner assignment decision to avoid unfavorable opinions regarding RPTs. This study addresses this gap in the literature.

The remainder of this paper is organized as follows. Section 2 reviews prior literature and develops testable hypothesis. Section 3 describes the methodology and sample selection. Section 4 presents empirical results, and section 5 concludes the paper.

## **LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### **Literature on RPTs**

There are two competing theoretical perspectives on RPTs. The efficiency-enhancing theory contends that the weak legal enforcement and inefficient market mechanisms strongly increase transaction costs for independent companies.



Firms can form corporate groups and use RPTs to optimize internal resource allocation, lower transaction costs, and improve return on assets (Shin and Park, 1999; Khanna and Palepu, 2000). The conflict of interest theory views RPTs as value-destroying activities that can be abused to expropriate shareholders' wealth (Chang and Hong, 2000).

Empirical research on how RPTs reduce transaction costs and facilitate internal resource allocation is relatively sparse. In the context of China, Chen et al. (2012) show that firms in more competitive industries tend to increase normal RPTs to diminish transaction costs, which can potentially alleviate their bankruptcy risk. Similarly, Wong et al. (2015) document that RPTs are generally used as a tool for improving resource allocation efficiency among affiliated firms within the same business group, hence facilitating firm value. Existing evidence generally supports the conflict of interest theory. For instance, Kohlbeck and Mayhew (2010) show that S&P 500 firms with RPT experience significantly lower valuation and marginally lower subsequent return than firms without RPTs. Ryngaert and Thomas (2012) observe a sample of U.S. small and mid-sized firms and distinguish between the impacts of ex ante RPTs (transactions that predate a counterparty becoming a related party) and ex post RPTs (transactions initiated after a counterparty becomes a related party) on firms. They find that ex post RPTs are pertinent to reduced shareholder wealth and firm profitability. Chen et al. (2011) provide evidence that Chinese IPO firms engaging in RPTs have poorer post-IPO long term performance. Kang et al. (2014) report that the RPTs of Korean chaebol firms, on average, diminish firm value, and that this value destruction is most pronounced when the control-ownership wedge is high.

## **Literature on opinion shopping**

Using an audit opinion forecasting model and U.K. data, Lennox (2000) finds that observed audit opinions do not generally improve after firms switch audit firms. However, his results indicate that switching firms can minimize the probability of receiving modified reports, and thus firms successfully engage in opinion shopping. In subsequent years numerous studies also find evidence that firms are successful in opinion shopping through switching audit firms (e.g., Carcello and Neal, 2003; Davidson et al., 2006; Newton et al., 2015).

In the context of China, Chan et al. (2006) demonstrate that local state-owned enterprises (SOEs) in China with qualified opinions can shop for unqualified opinions by switching from non-local to local auditors. They further find that local SOEs obtain more favorable audit opinions from local auditors in regions with a low level of institutional development (Chan et al., 2010) or when they face the need for new equity financing or the threat of delisting (Chan et al., 2012). Chen et al. (2016) analyze opinion shopping at the partner-level and argue that because of the dispersed audit market and weak internal control of audit firms, Chinese listed firms can dismiss incumbent auditors and appoint more acquiescent auditors to obtain more favorable audit opinions. They find that firms can succeed in partner-level opinion shopping after partner switching, and that incoming partners have a greater propensity to issue clean opinions than their outgoing partners.

## **Hypothesis development**

Davidson et al. (2006) observe that auditor opinion shopping could be an agency cost. The company's managers may be searching for a lower quality audit which reduces the quality of information that reaches financial markets. Managers may thus desire to use the resulting increase in asymmetric information for their own benefit. Unlike the U.S., China's auditing standards require engagement auditors (normally two) to sign their names on the audit reports. In typical situations one of the two signing auditors must act as the lead auditor responsible for field work, and the other must be at least a deputy executive of the firm and act as the reviewer. Because individual engagement partners differ in expertise, capability, risk profile, cognitive style, and ethical standards, audit quality varies (Gul et al., 2013).

In addition, Chinese auditors are responsible for identifying, assessing, and handling the risks of their clients' misreporting of activities related to RPTs (China CPA Auditing Standards no. 1323, CICPA, in 2006). Given the competing arguments regarding the financial reporting implications of RPTs, it remains to be seen how firms having RPTs can influence an audit firm's decision to switch engagement partners in China. The literature indicates that compared with arm's length transactions in a competitive business environment, firms have abundant discretion over the timing, amount, and value of RPTs that may reduce firm value (e.g., Cheung et al., 2006; Kohlbeck and Mayhew,

2010). RPTs can be used by controlling owners to extract private benefits from minority shareholders through manipulating earnings or diverting resources away from their companies (i.e., tunneling) (Claessens et al., 2006; Aharony et al., 2010). RPTs can also be conducted as an avenue of sustaining affiliated firms that are new and/or have financial difficulty (Friedman et al., 2003). For these reasons, RPTs are likely to contain a massive amount of management discretion and hence they tend to be conducted with prices, volume, and conditions different from those in arm's length. Therefore, RPTs are likely to enlarge firm-specific factors because of their discretionary and arbitrary nature. Consistent with this argument external auditors consider RPTs to be a factor that increases inherent risk (Gordon et al., 2007).

Despite the conflicting arguments of RPTs, RPTs can potentially fulfill the underlying needs of the company, and thus promote operating efficiency. However, most listed firms in China are state controlled. Such firms often construct complex and frequent RPTs with their related parties for nefarious purposes (e.g., the hiding of losses. To untangle these transactions, auditors bear higher audit risk and thus need put more time and effort into the auditing process (Habib et al., 2015). The literature on audit quality also indicates that an increase in audit risk accompanies increases in the proportion of firms that receive MAOs (DeFond et al., 1999; Francis and Krishnan, 1999). Receiving an MAO would depress the prices of a firm's securities and impair its ability to raise funds in future, and lead the firm face greater regulatory scrutiny (Chen et al., 2010; Lin and Liu, 2010), which may potentially constrain managerial opportunistic behavior. In addition, the salient features of the audit market in China are the presence of heterogeneous audit quality among audit partners within the same audit firm, fewer incentives of mutual monitoring among audit partners, and lower cost of audit failures for audit firm and their partners due to less severe regulatory sanctions / penalties (Gul et al., 2013). Firms in China can successfully pressure audit firms into removing non-acquiescent partners in order to prevent the issuance of MAOs (Chen et al., 2016). Thus, RPTs may provide greater incentives for controlling owners to pressure audit firm to produce a request for a partner switch. Taken together, we argue that firms engage in more RPTs would be likely to affect audit firm's partner switching decisions and search for a more pliable partner for the purpose of opinion shopping so as to mitigate the negative influence of receiving an MAO. The research hypothesis is as follows:

Hypothesis 1: Firms with more RPTs are likely to succeed in partner-level audit opinion shopping

## METHODOLOGY

### Measuring opinion shopping

Following previous research (e.g., Lennox, 2000), we define partner-level opinion shopping (*PSHOP*) as the difference in the client's predicted probability of receiving an MAO conditioned to the switching and the non-switching partner scenarios. Based on previous studies (e.g., Chan and Wu, 2011; Firth et al., 2012; Chen et al., 2016), we include several client firm characteristics that may affect the auditors' propensity to issue MAOs, including partner switch (*PSWITCH*), prior-year audit opinion (*L1MAO*), profitability (*ROA*, *LOSS*, *CFO*), financial risk (*LEV*, *OTHAR*, *CR*), client size and age (*SIZE*, *AGE*), accounts receivable and inventories intensiveness (*ARINV*), and stock performance (*MAR*). Following Lennox (2000), we also include interaction terms between *PSWITCH* and each of other variables to capture the difference in coefficients on explanatory variables between firms with and without a partner switch. To obtain the predicted probability of receiving an MAO in a given year, we estimate the following probit model:

$$\begin{aligned} \text{Pr } ob(MAO_{it}) = & \beta_0 + \beta_1 PSWITCH_{it} + \beta_2 L1MAO_{it} + \beta_3 ROA_{it} + \beta_4 LOSS_{it} + \beta_5 CFO_{it} + \beta_6 LEV_{it} + \beta_7 OTHAR_{it} + \beta_8 CR_{it} \\ & + \beta_9 SIZE_{it} + \beta_{10} ARINV_{it} + \beta_{11} AGE_{it} + \beta_{12} MAR_{it} + \beta_{13} PSWITCH_{it} \times L1MAO_{it} + \beta_{14} PSWITCH_{it} \times ROA_{it} \\ & + \beta_{15} PSWITCH_{it} \times LOSS_{it} + \beta_{16} PSWITCH_{it} \times CFO_{it} + \beta_{17} PSWITCH_{it} \times LEV_{it} \\ & + \beta_{18} PSWITCH_{it} \times OTHAR_{it} + \beta_{19} PSWITCH_{it} \times CR_{it} + \beta_{20} PSWITCH_{it} \times SIZE_{it} + \beta_{21} PSWITCH_{it} \times ARINV_{it} \\ & + \beta_{22} PSWITCH_{it} \times AGE_{it} + \beta_{23} PSWITCH_{it} \times MAR_{it} + \sum Years + \sum Industries + \varepsilon_{it} \end{aligned} \quad (1)$$

where for firm  $i$  in year  $t$ :  $MAO$  = indicator variable that takes the value of 1 if the firm receives a modified audit opinion, and 0 otherwise;  $PSWITCH$  = indicator variable that takes the value of 1 if the firm is audited by a new partner, and 0 otherwise;  $L1MAO$  = last year's  $MAO$ ;  $ROA$  = net income scaled by total assets;  $LOSS$  = indicator variable that takes the value of 1 if the firm reports a loss for the year, and 0 otherwise;  $CFO$  = cash flow from operations scaled by total assets;  $LEV$  = total liabilities divided by total assets;  $OTHAR$  = other accounts receivable scaled by total assets;  $CR$  = current assets divided by current liabilities;  $SIZE$  = natural log of total assets;  $ARINV$  = sum of accounts receivable and inventory divided by total assets;  $AGE$  = number of years since the firm's initial public offering;  $MAR$  = market-adjusted stock return over the fiscal year;  $Years$  = year dummies;  $Industries$  = industry dummies (based on CSRC industry classification standard).

We use the coefficients obtained in equation (1) to calculate the probability of receiving an MAO if a firm switches its partner ( $MAO_S$ ) and the probability of receiving an MAO if a firm does not switch its partner ( $MAO_{NS}$ ). The difference in the conditional probability of a firm's receiving an MAO between the two scenarios (i.e.,  $MAO_S - MAO_{NS}$ ) is defined as the opinion shopping variable, denoted  $POPSHOP$ . A negative (positive) value of  $POPSHOP$  implies that firms engage in opinion shopping if there is a partner switch (no partner switch).

## Model specification

We run the following probit model to test the association between RPTs and opinion shopping:

$$\begin{aligned} \Pr ob(PSWITCH_{it}) = & \gamma_0 + \gamma_1 POPSHOP_{it} + \gamma_2 RPT_{it} + \gamma_3 POPSHOP_{it} \times RPT_{it} + \gamma_4 TENURE_{it} + \gamma_5 L1PTENURE_{it} + \gamma_6 PSPEC_{it} \\ & + \gamma_7 CI_{it} + \gamma_8 ROA_{it} + \gamma_9 LOSS_{it} + \gamma_{10} MAR_{it} + \gamma_{11} GROWTH_{it} + \gamma_{12} LEV_{it} + \gamma_{13} CFO_{it} + \gamma_{14} ARINV_{it} + \gamma_{15} SEO_{it} \\ & + \gamma_{16} SIZE_{it} + \gamma_{17} AGE_{it} + \sum Years + \sum Industries + \varepsilon_{it} \end{aligned} \quad (2)$$

where for firm  $i$  in year  $t$ :  $RPT$  = total annual PRTs scaled by total assets;  $TENURE$  = number of consecutive years that the firm has retained the incumbent audit firm;  $L1PTENURE$  = last year's average number of consecutive years that the engagement partners have signed the annual audit report of the client;  $PSPEC$  = indicator variable that takes the value of 1 if any of the engagement partners is the industry leader or has a market share of greater than 10 percent in terms of total assets audited in the industry, and 0 otherwise;  $CI$  = natural log of the client's total assets scaled by the sum of the natural log of total assets of all clients audited by the same audit firm;  $GROWTH$  = growth rate of sales;  $SEO$  = indicator variable that takes the value of 1 if the firm has seasoned equity offering in the next year, and 0 otherwise. All other variables are defined in Equation (1).

In equation (2), the primary variable of interest is the coefficient ( $\gamma_3$ ) on the interaction term,  $POPSHOP \times RPT$ . A negative estimate indicates that firms conducting more RPTs are more likely to succeed in partner-level opinion shopping. Following prior research (Williams, 1988; Mande and Son, 2013; Bagherpour et al., 2014; Hennes et al., 2014; Chen et al., 2016), we control for various factors that previously have been shown to affect the probability of auditor changes, including audit firm's and partner's tenures ( $TENURE$ ,  $L1PTENURE$ ), partner industry expertise ( $PSPEC$ ), client importance ( $CI$ ), return on assets ( $ROA$ ), a loss indicator ( $LOSS$ ), stock performance ( $MAR$ ), sales growth rate ( $GROWTH$ ), debt ratio ( $LEV$ ), cash flow from operations ( $CFO$ ), the ratio of accounts receivable and inventory to total assets ( $ARINV$ ), an indicator for a seasoned equity offering ( $SEO$ ), firm size ( $SIZE$ ), and firm age ( $AGE$ ).

## Sample

The sample consists of A-share firms listed on the Shanghai and Shenzhen Stock Exchanges for the period 2002-2015. We retrieve firms' RPTs, accounting, and stock return data mainly from the China Stock Market and Accounting Research (CSMAR) database, and auditor data from the Taiwan Economic Journal (TEJ) database. The sample starts in 2002 because this is the first year that data on the reasons for switching audit firms was officially and fully disclosed. We first exclude financial service and insurance firms and first-year IPO firms. We also remove observations due to missing data related to auditor identities, RPTs, and control variables in the regression models. We delete firms that switch signatory auditors who are not audit partners. Since the research focus is on audit partner changes rather than

audit firm switches, we delete observations in which clients switch audit firms. Furthermore, in the spirit of Lennox (2002), we identify and delete observations with audit partner switches that do not appear to be caused by their clients' opinion shopping motive. This leaves a final sample of 12,827 firm-year observations.

## RESULTS

### Descriptive statistics

Table 1 provides descriptive statistics of the sample. The average *PSWITCH* is 0.43, suggesting that 43% of sample firms switch audit partners before they arrive at the tenure limit of mandatory rotation. This is consistent with prior work finding that audit partner switches are prevalent in the Chinese capital market (Firth et al., 2013; Lennox et al., 2014; Chen et al., 2016). The average *POPSHOP* is -0.002, indicating that firms are inclined to improve audit opinions if they replace the incumbent audit partners. The mean (median) RPTs normalized total assets (*RPT*) are 36.8% (20.8%).

The average audit firm tenure (*TENURE*) is 7.192 years, and the average audit partner tenure (*LIPTENURE*) is 1.531 years. On average, 4.1% of sample firms are audited by industry specialists (*SPEC*), and the mean of client importance (*CI*) is 4.4%. The average return on assets (*ROA*) is 3%, and about 12% of the sample observations report loss (*LOSS*) for the year. The average stock return (*MAR*) is 0.3%, and the average sales growth rate (*GROWTH*) about 19%. The typical firm has a debt to assets ratio (*LEV*) of 50%. The mean operating cash flows (*CFO*) account for 4.6% of total assets. The ratio of the sum of accounts receivable plus inventory to total assets (*ARINV*) averages 27.5%. Only about 1.2% of the firms conduct seasoned equity offering (*SEO*). The mean of firm size (*SIZE*) is 21,825, and the average listing age (*AGE*) is 9.966 years.

**Table 1: Descriptive statistics.**

	Mean	Standard deviation	25th percentile	Median	75th percentile
<i>PSWITCH</i>	0.430	0.495	0.000	0.000	1.000
<i>POPSHOP</i>	-0.002	0.013	0.000	0.000	0.0004
<i>RPT</i>	0.368	0.530	0.065	0.208	0.455
<i>TENURE</i>	7.192	4.531	4.000	6.000	10.000
<i>LIPTENURE</i>	1.531	0.749	1.000	1.333	2.000
<i>PSPEC</i>	0.044	0.206	0.000	0.000	0.000
<i>CI</i>	0.029	0.029	0.007	0.021	0.039
<i>ROA</i>	0.030	0.065	0.010	0.030	0.058
<i>LOSS</i>	0.119	0.324	0.000	0.000	0.000
<i>MAR</i>	0.003	0.502	-0.250	-0.072	0.158
<i>GROWTH</i>	0.189	0.499	-0.034	0.114	0.287
<i>LEV</i>	0.497	0.211	0.343	0.498	0.642
<i>CFO</i>	0.046	0.078	0.004	0.045	0.091
<i>ARINV</i>	0.275	0.179	0.138	0.249	0.381
<i>SEO</i>	0.012	0.109	0.000	0.000	0.000
<i>SIZE</i>	21.825	1.267	20.942	21.692	22.551
<i>AGE</i>	9.966	5.832	5.000	9.000	14.000

Variable definitions: *PSWITCH* = indicator variable set to 1 if the firm is audited by a new partner, and 0 otherwise. *POPSHOP* = difference in the predicted probability between receiving a MAO conditioned to a firm switch its partner and receiving a MAO conditioned to not switching the partner. *RPT* = amount of RPTs scaled by total assets. *TENURE* = number of consecutive years that the firm has retained the incumbent audit firm. *LIPTENURE* = last year's average number of consecutive years that the engagement partners have signed the annual audit report of the client. *PSPEC* = indicator variable set to 1 if any of the engagement partners is the industry leader or has a market share of greater than 10 percent in terms of total assets audited in the industry, and 0 otherwise. *CI* = natural log of the

client's total assets scaled by the sum of the natural log of total assets of all clients audited by the same audit firm. *ROA* = net income scaled by total assets. *LOSS* = indicator variable set to 1 if the firm reports a loss for the year, and 0 otherwise. *MAR* = annual return minus annual market return. *GROWTH* = change in sales scaled by lagged sales. *LEV* = total debt deflated by total assets. *CFO* = cash flow from operations scaled by total assets. *ARINV* = accounts receivable plus inventory scaled by total assets. *SEO* = indicator variable set to 1 if the firm has seasoned equity offering in the next year, and 0 otherwise. *SIZE* = natural log of total assets. *AGE* = number of years since the firm's initial public offering.

## Regression results

Table 2 presents the estimation results for the partner switching model. The coefficient on *POPSHOP* is significantly negative ( $p < 0.01$ ). This finding is consistent with the evidence that firms can successfully press audit firms to switch (retain) incumbent partners when the new partners are more (less) likely to issue clean opinions. In addition, the coefficient on the interaction term, *POPSHOP*×*RPT* is significantly negative ( $p < 0.05$ ), supporting the hypothesis that firms with more RPTs are more likely to succeed in partner-level opinion shopping. This finding is also in line with the perspective of weak governance for RPT usage. The results for most of the control variables are consistent with previous studies.

**Table 2: Related party transactions and audit opinion shopping.**

	Expected sign	<i>PSWITCH</i>	
		Coefficient	z-statistic
Intercept		-0.509**	-1.98
<i>POPSHOP</i>	–	-37.961***	-17.14
<i>RPT</i>	+/-	0.010	0.42
<i>POPSHOP</i> × <i>RPT</i>	–	-9.254**	-2.48
<i>TENURE</i>	+/-	0.016***	5.58
<i>LPTENURE</i>	+/-	0.137***	8.57
<i>PSPEC</i>	+/-	0.112**	2.03
<i>CI</i>	–	-0.665	-1.41
<i>ROA</i>	+/-	0.694**	2.57
<i>LOSS</i>	+/-	-0.424***	-9.24
<i>MAR</i>	+/-	-0.010	-0.43
<i>GROWTH</i>	+	0.002	0.07
<i>LEV</i>	+/-	0.024	0.32
<i>CFO</i>	–	-0.027	-0.17
<i>ARINV</i>	+	0.093	1.14
<i>SEO</i>	–	0.0002	0.00
<i>SIZE</i>	–	-0.011	-0.97
<i>AGE</i>	+/-	-0.013***	-5.09
Year fixed effects		Yes	
Industry fixed effects		Yes	
Pseudo R <sup>2</sup>		0.051	
n		12,827	

See table 1 for definitions of variables. z-statistics are based on standard errors clustered by firm. \*, \*\* and \*\*\* indicate two-tailed significance at the 0.10, 0.05 and 0.01 levels, respectively.

## Further analysis

The literature both theoretically and empirically documents that operating and non-operating transactions with related parties are subject to management discretion (Jiang et al., 2010; Lee et al., 2016). We further investigate whether the positive association between RPTs and partner-level opinion shopping attributes to operating or non-operating RPTs.

From an efficiency-enhancing perspective, related party purchases and sales can encourage cooperation among entities and maximize the operational efficiency and competitiveness of group companies (Liu and Liu, 2007), facilitate firm value (Wong et al., 2015), and allow auditors to reduce audit effort and audit risk (Habib et al., 2015). Nevertheless, controlling owners can easily rely on related purchases / sales to expropriate minority shareholders' interests by propping up earnings or tunneling resources (Aharony et al., 2010; Jian and Wong, 2010). Thus, it is not clear whether operating RPTs are more likely to trigger modified opinions by auditors for client firms which in turn motivates firms to search for lenient audit partners and succeed in their attempts to obtain more favorable opinions. In addition, the literature commonly supports the value-destroying effects of non-operating RPTs. That is, intercorporate loans can be used by parent firms for tunneling or siphoning resources out of their listed subsidiaries. Hence, firms which conduct such transactions have poor future performance, higher probability of entering financial distress in the future (Berkman et al., 2009; Jiang et al., 2010; Kohlbeck and Mayhew, 2010), significant audit risk faced by auditors (Habib et al., 2015), and more importantly, higher probability of receiving an MAO (Jiang et al., 2010). Therefore, firms that have more non-operating RPTs may engage in opinion shopping by switching audit partners.

We start by replacing *RPT* with the following two variables: *OP\_RPT* (operating RPTs) and *NOP\_RPT* (non-operating RPTs). The former is measure as the sum of sales and purchases of goods and services revenue and expenses, scaled by total assets. While the latter is the sum of relating party intercorporate loans (include capital transfer, loans, guarantees, and collateral), scaled by total assets. The results of this analysis are shown in Table 3. The table shows that the coefficient of the *POPSHOP*×*NOP\_RPT* interaction term is negative and significant ( $p < 0.05$ ) while the coefficient on the *POPSHOP*×*OP\_RPT* interaction term is negative but not significant. This indicates that firms utilize intercorporate loans to carry out value-destroying tunneling and this motivates them to replace incumbent partners to obtain more favorable audit opinions. It is also consistent with the explanation of self-dealing in relation to non-operating RPTs.

**Table 3: Operating versus non-operating RPTs.**

	Expected sign	<i>PSWITCH</i>	
		Coefficient	z-statistic
Intercept		-0.488*	-1.88
<i>POPSHOP</i>	–	-37.561***	-17.37
<i>OP_RPT</i>	+/-	0.011	0.20
<i>NOP_RPT</i>	+/-	-0.013	-0.28
<i>POPSHOP</i> × <i>OP_RPT</i>	+/-	-0.469	-0.06
<i>POPSHOP</i> × <i>NOP_RPT</i>	–	-18.299**	-2.17
<i>Controls</i>	+/-	Yes	
n		12,827	

*OP\_RPT* = amount of operating RPTs scaled by total assets. *NOP\_RPT* = amount of non-operating RPTs scaled by total assets. z-statistics are based on standard errors clustered by firm. \*, \*\* and \*\*\* indicate two-tailed significance at the 0.10, 0.05 and 0.01 levels, respectively.

## Sensitivity analyses

We conduct the following two sensitivity analyses. First, since different types of modified opinions represent different levels of severity in accounting irregularities, they may vary in terms of costs to audit clients (Chen et al., 2010). Firms are able to shop for clean opinions when modified opinions are warranted or for less-severe modified opinions (e.g., unqualified opinions with explanatory notes) when severe modified opinions (e.g., qualified or disclaimers/adverse opinions) are warranted. Therefore, to measure the different types of MAOs according to their levels of severity, we code the audit opinion variable *OPIN\_Type* from 0 to 3 to represent clean opinions, unqualified opinions with explanatory notes, qualified opinions, and qualified opinions with explanatory notes/disclaimers opinions/adverse opinions, respectively. We replace *MAO* with *OPIN\_Type* in audit reporting model (equation (1)) and adopt an ordered probit regression to estimate the predicted probability. We then replace the variable *POPSHOP* (equation (2)) with *POPSHOP\_Sev*, which is defined as the difference in the predicted probability between receiving a non-clean opinion conditioned on a firm switch its audit partner and receiving a non-clean opinion conditioned on not switching the partner and rerun the regression. Second, we recognize that the findings could be affected by endogeneity. It is possible

that successful opinion shopping and RPTs may be influenced by an omitted variable such as quality of management. A firm with inferior directors/managers may prefer acquiescent engagement partners so as to manipulate audit opinions, and thus affect an audit firm's partner assignment decision. Further, the quality of management is more likely to affect the use of RPTs. Therefore, we estimate a change specification which is more capable of controlling for the endogeneity induced by omitted variables. Specifically, we take the year to year change for each variable in equation (2) so that each firm effectively serves as its own control. This alleviates the impact of omitted variables, particularly if those variables stay relatively constant across years. The untabulated results show that the main result is robust to the alternative measure of opinion shopping and is unlikely driven by endogeneity bias.

## CONCLUSION

This study examines how RPTs affect partner-level audit opinion shopping. Extant research and anecdotal evidence generally support the view that RPTs are more likely to reflect opportunistic insider behavior. Further, RPTs are often associated with increased audit risk, which in turn, increases the probability of receiving MAOs. Moreover, for a firm, an MAO usually results in more stringent regulator supervision of managerial actions and a negative market reaction, constraining the ability of managers to behave opportunistically. Therefore, firms conducting more RPTs have incentives to influence their audit firms' partner assignment decisions for the sake of obtaining more favorable audit opinions. Using a sample from Chinese listed firms, we find that firms with more RPTs are more likely to successfully engage in opinion shopping. The finding is consistent with a weak governance motivation for RPTs usage. In addition, this association is more pronounced when firms conduct more non-operating RPTs.

This study responds to calls for research on the role of individual auditors in determining audit quality (e.g., Francis, 2011; Gul et al., 2013). Several jurisdictions, such as Australia, China, Taiwan, and countries in the European Union already require disclosing the names of the engagement partners in audit reports, and others, such as the U.S., are proposing adoption of similar disclosure policies. This study adds to the debate on what factors motivate client firms to shop for opinions at the partner-level. Thus, it may have important policy implications for standard-setters in China.

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# **BUILDING WORK ENGAGEMENT OF TEMPORARY SERVICE EMPLOYEES: A MULTI-LEVEL EXAMINATION OF JOB DEMAND-RESOURCE MODEL**

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## **ABSTRACT**

This study these research gaps, we propose a multilevel model of work engagement which incorporates autonomy support climate (job resource at the unit level) and psychological capital (personal resource at employee level). This study aims to test how the interaction between autonomy support climate and PsyCap influence employee service performance through employee-level work engagement among part-time employees in service settings. Analysis of multilevel time-lagged data collected at two points in time from 560 service employees of 35 gas stations in Taiwan support our predictions. The findings have meaningful implications for the psychological capital, work engagement and service management literature as well as for practical management in service industries.

**Keywords:** autonomy support climate, psychological capital, work engagement, service performance.

## **INTRODUCTION**

Moreover, to respond today's challenging and competitive service economy, organizations hire part-time workers for front-line service as being the most prevalent non-standard workforce arrangement to achieve the flexibility of human resources (Bernhard & Sverke, 2003; Barling & Gallagher, 1996; Sato, 2005). Workers with non-standard contracts form a significant part of the workforce in countries around the world (de Jong, Schalk, and Goessling 2007). Surprisingly, prior studies exploring the effects of the social-contextual factor (e.g., social support, supervisory coaching) on work engagement have mostly been conducted with traditional full-time permanent employees (e.g., Halbesleben, 2010; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007), thus limiting our real understanding of work engagement to part-time employees in service industry. Although part-time employees shown lower job involvement (Thorsteinson, 2003), organizational commitment (Conway & Briner, 2002), and organizational citizenship behaviors (Conway & Briner, 2002), they may also have a strong attachment to the organization (Rousseau & Wade-Benzoni, 1995) due to their fairly fixed and ongoing schedules. Thus, scholars have called for further studies to examine how firms use social support in helping non-standard employee feel more satisfied, committed and thus being belong to part of the firms (Bernhard-Oetted, Cuper, Berntson, & Isaksson, 2008).

To address these research gaps, we propose a multilevel model of work engagement which incorporates autonomy support climate (job resource at the unit level) and psychological capital (or simply PsyCap) (personal resource at employee level). This study aims to test how the interaction between autonomy support climate and PsyCap influence employee service performance through employee-level work engagement among part-time employees in service settings. The present study makes three contributions to the literature. First, the present study contributes to the autonomy support literature by examining how a new construct- autonomy support climate influences on service performance via moderation and meditation paths in a part-time sample. Second, previous research on work engagement only focuses personal resource constructs on few distinctive construct, such as self-efficacy and optimism. We further examine psychological capital, a multi-dimensional global core construct, which incorporates cognitive (e.g. efficacy), motivational (e.g. hope) and other positive psychological resources (e.g. optimism and resiliency) (e.g. see Luthans & Youssef, 2004; Luthans, Youssef, & Avolio, 2007b; Luthans, Avolio, Avey, & Norman,

2007a). The investigation of a higher-order global construct in psychological resources literature (Luthans & Youssef, 2007; Luthans, Youssef, & Avolio, 2007) consolidates our understanding of the effect of positive psychological resources on work engagement. Third, by identifying the interplay relationships between autonomy support climate and employee psychological capital, this study provides a perspective of organization-person fits on the job demands-resources model (JD-R model) of work engagement.

## **LITERATURE BACKGROUND AND HYPOTHESES**

### **Work-unit-level autonomy support climate and service performance**

Autonomy support climates create a work environment for employees in which autonomy nurtures personal growth and development (; Ryan & Deci, 2000), and an interpersonal climate provided by supervisors supports the development of relational connections between employees and organizations. We expect that autonomy-supportive managers will facilitate satisfaction of all three intrinsic needs (e.g., autonomy, competence, relatedness); for example, through asking employee what they want (e.g., provides employee choices and options and encouraged to ask questions), promoting employee's self-efficacy (e.g., conveyed confidence in employee 's ability to do well at my job) and promoting high involvement(e.g., listens to how employee would like to do things and tries to understand how see things).

An autonomy support climate may improve employee perceptions of available job resources for supervisory interpersonal support, thus facilitating a strong intrinsic motivational force of employees toward their work. People who are intrinsically motivated are inherently interested in and enjoy performing tasks. Therefore, we expected an autonomy support climate to exert a top-down influence on employee work engagement. According to social exchange theory part-time employees who perceive that supervisory interpersonal support about their work, are more likely to be motivated and engaged (Blau, 1964). Thus, we propose the following:

*Hypothesis 1:* Work-unit-level autonomy support climate are positively related to part-time employees work engagement.

### **Work Engagement and Service performance**

A high level of work engagement enables service employees to maintain energy for long working periods, enthusiasm for service routine and mental resilience for serving difficult customers (Schaufeli & Bakker, 2004; Schaufeli & Salanova, 2007; Bakker & Schaufeli, 2008). According to broaden and build theory (Fredrickson, 2001), this positive emotions may broaden employees' thought-action repertoires, implying they leads to cognitive broadening and create their own job and personal resources. Thus, based on theory and past research, individuals who score higher in work engagement can be expected to put forth extra effort and perseverance based on greater energy while working (vigor); more involved in one's work and experiencing a sense of significance enthusiasm. Inspiration, and challenge (dedication); and fully concentrated and engrossed in work (absorption). In other words, higher levels of work engagement would facilitate a stronger motivation aimed at the successful accomplishment of goals and tasks, which should lead to desired performance outcomes. Thus, we propose the following hypothesis:

*Hypothesis 2:* Part-time employees' work engagement is positively related to their service performance.

### **Autonomy support climate and service performance: the mediating role of work engagement**

Extending previous research on work engagement and following the logic of Hypotheses 1 and 2, we examined autonomy support climate as a more distal predictor of followers' job performance. Supporting this argument, Bakker & Demerouti's (2007) JD-R model of work engagement provides a general framework that explains the effects of job resource and motivational process on employees' attitudes and job performance. Specifically, they reported that employees' work engagement mediated the link between job resource and employees' job performance. Similarly,

Rich et al. (2010) draw from Kahn's theory (1990) and found that work engagement mediated the link between perceived organizational support and employees' job performance. Taking these theoretical perspectives and empirical findings together, we assert that autonomy-support climate influences service performance by directly influencing the degree to which an individual engages at work. We examine this possibility in this study and propose the following hypotheses:

*Hypothesis 3* : Part-time employees' work engagement partially mediates the relationship between work-unit-level autonomy support climate and part-time employees' service performance.

## **Interactive Effect of the Autonomy Support Climate and Psychological Capital**

PsyCap is a person's positive psychological state of development that is characterized by four positive psychological capacities: self-efficacy, optimism, hope, and resilience (Luthans et al., 2007; Sweetman & Luthans, 2010). The argument that PsyCap is a predictive factor of work engagement could be supported by the JD-R model in which personal resources are believed to link resiliency and refer to people's self-evaluations of their ability to control and adapt their demanding environment (Bakker and Demerouti, 2008). We believe PsyCap is a new global personal resource in the model of work engagement (Bakker, 2011), which is positively related to work engagement particularly when part-time employees are facing great challenge demands.

Informed by the interactionist perspective (Hattrup & Jackson, 1996), we considered the autonomy support climate as a supportive context and PsyCap as individual psychological capacities used to efficiently mobilize supportive resources, and expect they have an interaction effect on work engagement. Accordingly, we propose that PsyCap interacts with the autonomy support climate to influence work engagement in that autonomy support climate predicts work engagement for part-time employees with a high PsyCap. Therefore, we propose the following hypothesis:

*Hypothesis 4*: PsyCap moderates the effect of work-unit-level autonomy support climate on work engagement, such that the effect is stronger when positive PsyCap is high.

## **METHODS**

### **Sample and Procedures**

The data used in this study were collected in two waves from frontline service employees (includes part-time and full-time) employed at 35 chain gas stations of a largest petroleum corporation in Taiwan. After excluding invalid responses and employee participants who comprised less than one-third of the total number of employees working at each gas station, 560 supervisor-subordinate dyads were validly matched to the 35 supervisors. Age was also lower for PT employees ( $M = 20.41$ ,  $SD = 2.88$ ) than for those with FT employees ( $M = 26.12$ ,  $SD = 5.5$ ). Male represented 67.7% of the PT sub-sample, similar to the FT sub-sample at 57.9%.

### **Measures**

*Autonomy-support climate.* Autonomy support climate was measured using a 6-item version of the 15-item scale included in the Work Climate Questionnaire developed by Baard et al. (2004). The employees rated their perceptions of the extent to which their supervisors exhibited autonomy supportiveness. The participants responded, using a 7-point scale (where 1 = *strongly disagree* and 7 = *strongly agree*), to items such as "I feel that my manager provides me with choices and options."

We calculated the intragroup agreement statistics ( $r_{wg}$ 's) for the measure based on the grand mean (James, 1982), and obtained mean values of .96 for autonomy-support climate. We then assessed two intraclass correlations (ICCs; Bliese, 2000). ICC (1) was .11 and ICC (2) was 0.74. By considering the combined  $r_{wg}$ , ICC (1), and ICC (2) values, we concluded that aggregation was justified for the variable.

*PsyCap.* We measured PsyCap by using a 12-item PsyCap questionnaire (PCQ-12; Luthans et al., 2007<sup>a</sup>; Luthans et

al., 2007<sup>b</sup>). In this study, the employees described their individual PsyCap. The PsyCap construct consists of four dimensions: self-efficacy, hope, optimism, and resilience. The Cronbach's  $\alpha$  was .92 for the overall PCQ.

**Work Engagement.** We adopted the 9-item version of the Utrecht Work Engagement Scale (UWES) developed by Schaufeli, Bakker and Salanova. (2006), which comprised 3 items for engagement vigor ( $\alpha = 0.83$ ; e.g., "At work, I feel full of energy"), 3 items for dedication ( $\alpha = 0.88$ ; e.g., "I am enthusiastic about my job"), and 3 items for absorption ( $\alpha = 0.86$ ; e.g., "When I am working, I forget everything else around me").

**Service performance.** We adopted items from the service performance measure used by Borucki and Burke (1999). One of the included items was "Asking good questions and listening to find out what a customer wants." The supervisors were asked to evaluate the individual service performance of their subordinates by using a 7-point scale (where 1 = *highly unsatisfactory* and 7 = *highly satisfactory*). The Cronbach's  $\alpha$  for this scale was 0.84.

**Control variables.** At the employee-level, we controlled for gender (0 = male; 1 = female), education level (0 = high school or lower; 1 = above high school), tenure (in years), pay fulfilment (Cuyper & Witte, 2006), and job demand (0 = night shift and graveyard shift; 1 = day shift). At unit-level, unit size (number of total unit numbers) was controlled for. Last, at the unit-level, we controlled unit size (number of total unit numbers) in all of the analyses.

## RESULTS

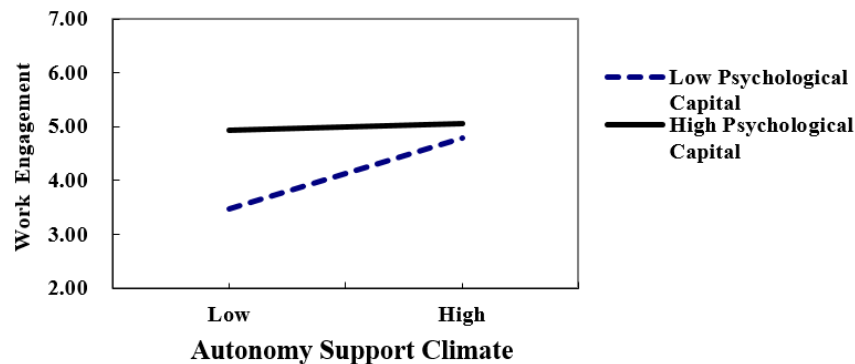
We first examined whether significant between-team variance existed in employee service performance. We followed the procedure recommended by Bryk and Raudenbush (1992) and conducted a null HLM analysis. The results revealed an 18% variance in employee service performance between the teams. This result provided a basis for examining individual-level and team-level predictors of employee service performance.

Hypothesis 1 proposes that work-unit-level autonomy-support climate are positively related to part-time employees work engagement, whereas Hypothesis 2 posited that part-time employees' work engagement are positively related to their service performance. As shown in Table 1, HLM results revealed that work-unit-level autonomy-support climate as a Level 2 predictor significantly predicted Level 1 part-time employees' work engagement ( $\hat{\gamma} = .46, p < .001$ , Model 1A). Similarly, HLM results revealed that part-time employees' work engagement significantly predicted their service performance ( $\hat{\gamma} = .09, p < .01$ , Model 4A). These results provide support for Hypotheses 1 and 2, respectively.

Hypothesis 3 examined whether part-time employees' work engagement mediate the relationship between work-unit-level autonomy-support climate and part-time employees' service performance. We used the parametric bootstrap method to test for indirect effects (Preacher et al., 2010). The results showed that the indirect effect of work-unit-level autonomy-support climate on service performance through work engagement was significant (the 95% confidence interval was [.01, .07], not including zero). Thus, Hypothesis 3 was supported.

Hypothesis 4 proposed PsyCap moderates the effect of work-unit-level autonomy support climate on work engagement, such that the effect is stronger when positive PsyCap is high. As shown in Model 2 in Table 3, the interaction term for shows that the cross-level interaction between PsyCap and work-unit-level autonomy support climate was negatively related to work engagement ( $\hat{\gamma} = -.15 < .05$ , Model 2A), which is opposite of prediction of Hypothesis 4. We further probe the interaction, we plotted graphically the interactive effects at high (+1 SD) and low level of (+1 SD) level of psychology capital shown in Figure 2 (Aiken & West, 1991). Figure 1 indicate that work-unit-level autonomy support climate was more positively related to work engagement when the level of PsyCap was low ( $\beta = .68, p < .01$ ) rather than high ( $\beta = .36, p > .10$ ). This suggests that work unit level autonomy support climate tends to have a stronger impact on work engagement when employees who score lower in psychological capital.

**Figure 1:** Cross-level interaction of autonomy support climate and psychology capital in predicting work engagement.



## DISCUSSION

### Theoretical Implications

First, this study provides a critical test of what service organizations can do from within the organization to enhance the work engagement and service performance of PT employees. Applying SDT, which is advocated by positive organizational behavior studies that proposed self-determination is an important factor influence work engagement, we observed that autonomy support climate positively fosters work engagement and subsequently enhances service performance. These results suggest that the autonomy support climate creates a dominant atmosphere related to part-time employees' service performance, and that work engagement plays a key role in motivational processes.

Second, we extend JD-R Model by highlighting PsyCap as a substantial personal resource acting an important moderator in the relationship between autonomy support climate as a social-contextual job resource and work engagement. Therefore, the current study answers Xanthopoulou et al.'s (2007) call to better understand possible moderating role of the personal resources in the relationship between job resources and work engagement. We found that work engagement mediated the relationship between autonomy support climate and service performance under a lower level of PsyCap. This finding extends the relationship of job resource and work engagement that majority of previous work has focused at the individual level (Demerouti & Bakker, 2011) as its outcome with little attention paid to the integrative multilevel moderated mediation model of JD-R framework.

Third, although overall our findings have provided general support for our proposed theoretical framework, there is an unexpected yet interesting finding that is worth discussion. We observed a negative interaction between PsyCap and work-unit-level autonomy support climate, which was contrary to our expectation based on the notion of a consistency effect (Bowen & Ostroff, 2004). Instead, they are more aligned with the substitute effect. We found that autonomy support climate was positively related to work engagement only when employees' PsyCap were low. This finding suggests that work-unit-level autonomy-support climate particularly matter when employee who score low in psychological capital for better service performance. Our findings are similar to Brockner (1988) behavioral plasticity theory which an individual who have low self-esteem levels are more reactive (exhibiting "plasticity" or malleability) to external factors (e.g. social influences). It seems that high self-esteem individuals are more confident in their competence and consequently respond to external factors with a lower strength than their counterparts. Thus, the effect of negative (or positive) circumstances on negative (or positive) outcomes should be stronger for those individuals with low self-esteem, relative to those with high self-esteem. Predictions from behavioral plasticity posit self-esteem as an important individual difference variable moderating the relationship between work environment conditions (e.g. adverse role conditions) and employee attitudes, motivation and behavior. Our findings also corroborate some earlier empirical evidence that high self-esteem employees were unaffected by these work environments (e.g. work environment support, supervisory support) relative to their low self-esteem counterparts (Pierce, Gardner, Dunham, & Cummings, 1993).

Finally, this study advances the understanding of the conditions under which autonomy support climates contribute work engagement among part-time service employees. Prior studies put more emphases on the effect of autonomy support on work engagement among full-time employees, whereas this study demonstrated the parallel importance of autonomy-support climate among part-time service employees to facilitate work engagement. The finding supports the tenet of SDT in that autonomy is a basic innate psychological need for humans (Deci and Ryan, 1985). This study demonstrated that non-standard workforce put much more attention the job resources especially in terms of socio-emotional resources (i.e. autonomy support climate). On the basis of psychological contracts theory, contract duration is considered crucial in differentiating relational from different employment relationship of groups (Rousseau, 1995). Some scholars suggested that part-time employees focus more economic and short-term exchange of benefits and contributions and less on socio-emotional exchange (i.e. relational psychological contract) (Cuyper & Witte, 2006). Thus, transactional psychological contracts dominate among part-time employees, while relational psychological contracts are thought to be dominant for full-time employees. In this study, we found a stronger positively relationship between autonomy support climate and work engagement among part-time employee. This suggests that while there may be mean differences by work status, self-determination theory is applicable to both full-time and part-time employees. These results differ from findings using a psychological contract theory (Cuyper & Witte, 2006), which claim transactional psychological contracts dominate among part-time employees. Therefore, intrinsic rewards (e.g. autonomy support climate) plays a more critical role in the work engagement of part-time service employees than full-time employees. This finding is an important contribution because it provides some insights into the reasons for the part-time not only to satisfy their economic need, but also need to satisfy their relational or interpersonal need.

## Limitations and Future Research

Based on conservation resource theory (Hobfoll, 1989), the literature on work engagement postulates that job resources can create a positive gain spiral, facilitating work engagement. A longitudinal study of telecom managers conducted by Schaufeli, Bakker, and van Rhenen (2009) empirically established the reciprocal relationships between work engagement and job resources, and established the association between psychological contract fulfillment and work engagement. However, the cross-sectional data examined in the study limits testing and interpretation of the possible reverse relationship. In other words, highly engaged employees may be responsible for their own PsyCap. In replicating our model, a future study can incorporate the measurement of work engagement and PsyCap at various times and thereby gain an optimal understanding of the gain spiral. In additional, previous studies have observed that associations of job demands and work engagement are typically weaker than associations of job resources and work engagement (e.g. Mauno et al., 2007; Halbesleben, 2010). However, these findings were generally obtained at the individual level. In this study, we focused on job resources at the organizational level, and observed substantial associations of job demands and work engagement. Future studies should consider job demands at the organizational level and clarify the relative effect of job resources and job demands at the organizational or work-unit level.

**Table 1:** Hierarchical Linear Modeling Results: Effects of Autonomy support climate on Service Performance among PT and employee

Variables	Part-Time (PT) Sample			
	Work Engagement		Service Performance	
	Model 1A	Model 2A	Model 3A	Model 4A
<b>Individual-level<sup>a</sup></b>				
Intercept	4.54(.07)***	4.57(.06)***	3.91(.05)***	3.91(.05)***
Gender	.21(.11)	.13(.10)	.07(.05)	.07(.05)
Education level	.25(.15)	.13(.13)		.03(.06)
Tenure	-.05(.04)	-.06(.05)	.02(1.73)	.04(.02)
Pay fulfillment	.63(.07)***	.38(.06)**	.00(.04)	.02(.04)
Job Demand	.04(.12)	.01(.09)	-.13(.04)	
<b>PsyCap</b>		.74(.06)***		-.03(.04)
Work Engagement			.09(.03)**	.09(.04)*
Service Performance				



<b>Team- level<sup>b</sup></b>				
Unit Size	.00(.02)	-.01(.01)		-.02(.01) **
ASC	.46(.07) ***	.29(.08) **	-.14(.06)	-.13(.06)
<b>Cross-level interaction</b>				
ASC × <b>PsyCap</b>		-.24(.10) *		-.03(.05)
Model Deviance <sup>a</sup>	1168.32	1053.15	671.37	677.28

Variables	Full-Time (FT) Sample			
	Work Engagement		Service Performance	
	Model 1B	Model 2B	Model 3B	Model 4B
<b>Individual-level<sup>a</sup></b>				
Intercept	4.79(.09) ***	4.79(.06) ***	4.04(.05) ***	4.04(.05) ***
Gender	-.00(.11)	.05(.14)	.16(.07) *	.06(.07) *
Education level	.07(.15)	.06(.11)	.04(.08)	.04(.08)
Tenure	.05(.02) *	.04(.02) *	.03(.01) *	.03(.01)
Pay fulfillment	.55(.10) ***	.36(.08) ***	.02(.05)	.02(.05)
Job Demand	-.02(.14)	-.16(.13)	.00(.08)	.01(.08)
<b>PsyCap</b>		.87(.06) ***		-.02(.04)
Work Engagement			.10(.04) *	.11(.05) *
Service Performance				
<b>Team- level<sup>b</sup></b>				
Unit Size	-.00(.02)	-.01(.01)	.01(.00)	-.01 (.01)
ASC	.32(.13) *	.23(.06) **	.11(.06)	.13(.06) *
<b>Cross-level interaction</b>				
ASC × <b>PsyCap</b>		-.16 (.07) *		-.08(.04)
Model Deviance <sup>a</sup>	618.09	533.77	364.47	370.61

Note. **358 (PT employees individual-level); 202 (FT employees individual-level)<sup>b</sup>** In all models, all variables except for education, marriage, and team job attribution were grand-mean centered at level 1. Entries corresponding to the predicting variables are estimations of the fixed effects ( $\gamma$ s values) with robust standard errors. DV = dependent variable. ASC = Autonomy support climate. Two-tailed tests.

<sup>a</sup> Deviance is a measure of model fit; the smaller the deviance is, the better the model fits. Deviance = -2 X log-likelihood of the full maximum-likelihood estimate.

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# AN ASSESSMENT OF THE USE OF CORPORATE ENTREPRENEURSHIP TO GAIN COMPETITIVE ADVANTAGE IN A SMALL MANUFACTURING COMPANY IN AN EMERGING ECONOMY

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## ABSTRACT

*The study focuses on investigating the practice of corporate entrepreneurship within a small manufacturing company in South Africa. The investigation will look into the depth of the practice of entrepreneurship within the organisation and determine whether entrepreneurship is practised correctly utilizing entrepreneurship principles. For small manufacturing companies in South Africa to gain competitive advantage, it will be important to ensure that good entrepreneurial values are encouraged and an excellent entrepreneurial spirit is prevalent in the organisation to enhance the innovative abilities of employees. It is imperative that management in the organization understand the concept and begin to create office environment which harbours this entrepreneurial behaviour among its employees. The study utilized a quantitative approach and analysed the data using SPSS (25.0). Tackled in the study is the background of the problem, objectives, significance of the study, literature review, and a snapshot of the research methodology. Furthermore, limitations of the study are also given.*

**Keywords:** Corporate entrepreneurship, Risk taking, Competitive Aggressiveness, Autonomy, Innovation, Pro-activeness, Entrepreneurship.

## INTRODUCTION

This study will attempt to explain the concept of corporate entrepreneurship and identify characteristics of a corporate entrepreneurial climate in a small manufacturing company. In the context of South Africa, this has been accompanied by government adopted laws and Black Economic Empowerment (BEE) that has pushed for emergence of new businesses. More so, entrepreneurship is changing the way businesses have been done, favouring a more global approach. However, the recent global economic recession has seen most small to medium businesses losing out and cutting costs to save themselves and this has affected entrepreneurial activities. More so, it should be noted that the intense global competition and technology advancements have placed a need for companies to be more entrepreneurial to survive (Lupondwana, 2016). Businesses that have well-developed capabilities are able to sustain growth and innovation, that keep them growing because these are critical components for business to develop in the 21st century (Scheepers, Hough & Bloom 2008). This small manufacturing company is a business that is still growing and has 43 full time employees (Lupondwana, 2016). The company is proudly South African and has two divisions; that are bed manufacturing and wood furniture manufacturing, and the company distribute its products to independent retailers in the Eastern Cape, Western Cape and Northern Cape (Lupondwana, 2016). Because of further increase of costs, Lupondwana (2016) noted that the company was faced with a challenge on how to generate more revenue. In order to gain competitive advantage, the company embarked on a process of combining entrepreneurship with the strategic requirements of the organisation. Embarking on a change of strategy is intended to give the company an advantage in terms of its marketing.

## RESEARCH PROBLEM

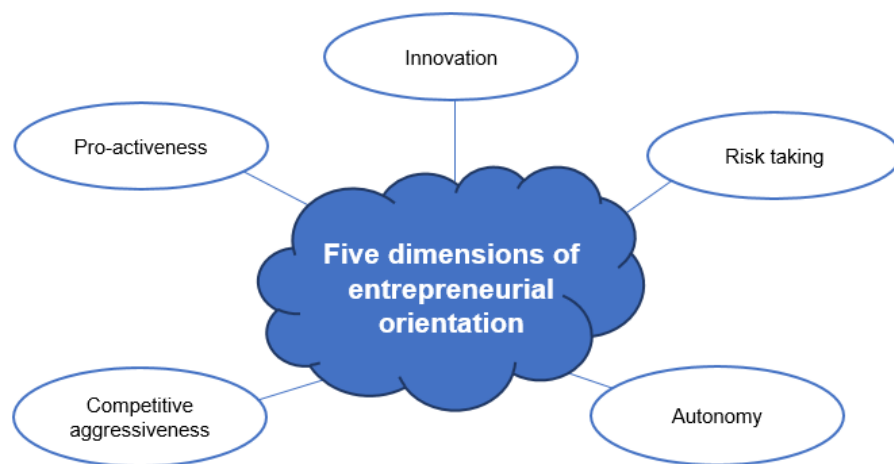
According to Johnson (2001) corporate entrepreneurship is a process that encompasses innovation and vision in a way that employees of that company or organisation will take up ownership of the organisation. More so, corporate entrepreneurship pertains combining a group of people with same vision and ideas and bring them together to map a way forward so as to take advantage of the business opportunities. As such, this is particularly important for company as the current economic climate has increased the price of foam used to manufacture bed mattresses, the 40% increase at the end of 2016 meant that companies using foam as a raw material may not be able to sustain their businesses and may face possible closure (Lupondwana, 2016). The other organizations may be focusing on cost cutting measures; the small company focuses on improving corporate entrepreneurship and the need to adapt corporate entrepreneurship principles for the company to survive. However, the company lacks the knowledge on how corporate entrepreneurship can be enhanced in such a way that it benefits the organisation. This study will identify factors that hinder or promote the idea of corporate entrepreneurship inside the organization. As mentioned by Venter, Urban, Beder, Oosthuizen, Reddy (2015), the net results of corporate entrepreneurship could either be related to company revitalisation, involving key tactical and/or operational changes, introducing something new to the marketplace and efforts that are aimed at driving the company forward. At the core of corporate entrepreneurship is the critical requirement of an action-oriented mind set that recognises opportunity, determines how to bring them to fruition and ultimately create something novel. Management is accountable for coming up with a tactical idea and initiating the development of a pro-business idea (Kutako, 2007).

## LITERATURE REVIEW

### Entrepreneurship

According to Venter *et al* (2015) entrepreneur as a term has existed since the 17<sup>th</sup> century. Cantillon proposed a view of entrepreneurial function and its relation to innovation. Drucker (1985) noted that an entrepreneur uses economic resources from one area of lower productivity to higher productivity for better profits. In addition, entrepreneurship has to be understood to be a behavioural trait as opposed to a personality trait whose foundation lies in concept and theory rather than intuition. Therefore, entrepreneurship must be viewed as several categories of behaviour, process and outcome definitions (Venter *et al*, 2015). Johnson (2001:137) defines an entrepreneur as an individual who takes agency and initiative; to make things happen, who manages the risk attached to the process. From literature review, it is noticed that despite the differences in definition, contradictory theories and lack of standardised definitions, there are similarities that can be observed to describe entrepreneurship (Venter *et al*, 2015). Some of these similarities are innovation, value creation, opportunity recognition, exploitation, creative process, risk taking and resourcefulness.

**Figure 1: The five dimensions of entrepreneurial orientation.**



**Source:** Adapted from Enslin (2010:31)

## **Innovation**

Lumpkin and Dess (1996:141) propose that innovation is the only dimension that has to be utilized by all entrepreneurial businesses, this is also true for the researched company. It is therefore important to understand that even in the presence of the other dimensions, if employees are not innovative; entrepreneurship does not exist on that firm. Mokgato (2013) quotes Macadam and McClelland (2002) as describing innovation as thinking “outside the box” and creating brain activity that sparks ideas. Company managers need to encourage their employees to come up with new ideas, employees need to be encouraged even though initially the ideas may seem uncertain (Venter *et al*, 2015). Innovation is defined by Mokgato (2013) as a value-adding process to the organization, its providers and consumers. In today’s volatile business climate, innovation can be an important drive for gaining competitive advantage (Venter *et al*, 2015). Lwamba, Bwisa and Sakwa (2013) mention that innovative new products, when introduced to the market, have very little competition and consequently the organization gets to enjoy high profits. In time those profits diminish because of competition, however, if a firm continues to come up with new ideas, products and services; the firm is most likely going to gain competitive superiority over a prolonged period of time and enjoy high profits (Lwamba, Bwisa and Sakwa, 2013). It is therefore concluded by scholars such as that financial performance and firm success are the core reasons why firms strive to be innovative.

## **Pro-activeness**

If a company goes after new opportunities, pioneering and initiative taking, it is regarded as being pro-active (Venter *et al*, 2015). Entrepreneurs become pro-active when they clearly define and effectively communicate the advantages of an innovation (Mokgato, 2013). Rauch, Wiklund, Lumpkin and Frese (2009) mentions that pro-activeness is an important dimension of entrepreneurial orientation that provides a more positive relationship between business performance and success. Pro-active organizations are characterized by employees who seek to find new and better ways of doing things, always looking into the future to establish new products and services that will be used to satisfy future demands ahead of competition thus gaining competitive advantage (Venter *et al*, 2015). It is therefore not only about looking into future demands, but also an ability to act on those demands ahead of competition (Venter *et al*, 2015). The company then gains first mover advantage and is able to secure knowledge of key factors and issues, access to rare resources, curve out market share and be in an advantageous position that will be costly for rivals to overtake (Stols, 2013).

## **Risk-Taking**

From a corporate entrepreneurship point of view, risk taking refers to the organization’s willingness to go after opportunities even though there is no guarantee that the undertaking will yield good results, confidently acting without surety of the consequences (Venter *et al*, 2015). Dess and Lumpkin (2005:152) define risk taking as an organization’s willingness to capture a venture opportunity even though they are not sure whether the venture will be successful or not but act boldly without knowing the end results. It is important to note that risk-taking is not gambling or blind optimism but rather about taking chances (Venter *et al*, 2015). Risk taking is a fundamental element of entrepreneurial orientation and every entrepreneur is aware of the fact that it is better to try something out and not succeed than to never try at all (Mokgato, 2013). Organizational culture usually informs us about the organization’s risk propensity (Bouchard, 2001), further the author states that structure and culture will either encourage or discourage risk-taking by the organization. The argument is that associating risk-taking with other dimensions of corporate entrepreneurship has seen risk-taking being viewed as one of the most distinctive dimension of an entrepreneur in existing firms (Govender, 2010). In conclusion of this argument Mokgato (2013) quotes Lotz and van der Merwe (2013) as saying that to gain competitive advantage and organizational success in future, organizations need to sense risky conditions and take measures accordingly to mobilize their resources rapidly under high risky conditions.

## Competitive Aggressiveness

Venter *et al* (2015) defines competitive aggressiveness as a company's ability to challenge its competitors and overcome its rivals in the industry. The scholar further states that this aggressiveness is characterised by a strong offensive position and vigorous response to competitive threats. The aggressiveness allows an organization to improve its market position and overtake their competitors (Arshad, Arshad, Rasli and Zain, 2013). For organizations to be aggressive, they usually capitalize on new technology or service niche market's needs. This manufacturing firm has championed this strategy by reducing their foam prices below competitors thus overwhelming competitors. Organizations with such aggressiveness are willing to "do battle" with competitors. Scholars are battling with distinguishing between competitive aggressiveness and pro-activeness (Mokgato, 2013). Antoncic & Hisrich (2003) mention that pro-activeness has to do with having an attitude to take over opportunities that present themselves, whereas competitive aggressiveness has to do with vigorous approach to competition.

## Autonomy

In corporate entrepreneurship, autonomy goes beyond being free to do whatever you want against structural constraints but rather it refers to an individual or team bringing forth an idea or vision and being self-directed in search of opportunity (Venter *et al*, 2015). Autonomy gives rise to "independent spirit" (Mason, Floreani, Miani, Beltrame and Cappelletto, 2015), and allows employees to have personal rule, free from controlling interferences by others (Govender, 2010) therefore autonomy focuses on independent actions by an individual or team whose mission is to introduce a new product or service from start to finish. (Venter *et al*, 2015). The onus is therefore on the managers to encourage these employees rather than criticize them when making mistakes. Encouraging the employee's is a strategy to retain them and making them feel like they are adding value to the organization's goals and objectives (Govender, 2010).

## Corporate Entrepreneurship

Johnson (2001) refers to corporate entrepreneurship as the creation of entrepreneurial new ventures both within and surrounding the organization. Moreover, Burgelman (1983) cited in (Sharma & Chrisman, 1999) defines corporate entrepreneurship as the process whereby a firm engages in business diversification through internal development. The success is driven by management vision, support and innovative organizational culture that are aimed at achieving the strategic key performance indicators through operations (Hsu, Tan, Jayaram & Laosirihongthong, 2014). In addition, Rutherford and Holt (2007) provide a more concise definition as they describe corporate entrepreneurship as a process of enhancing the ability of a firm to acquire and utilize the innovative skills and abilities of an organization's members. In conclusion, scholars and researchers in the field of corporate entrepreneurship have no clear, consistent definition of corporate entrepreneurship (Zahra, 1991; Zahra & Covin, 1995; Entebang & Harrison 2012; Jayeola, Oladunjoye & Adewumi, 2018).

# RESEARCH METHODOLOGY

## The Research Instrument

One of the most cost effective and efficient way to collect data is through questionnaires. Oosthuizen (2006) is of the opinion that questionnaires are effective because they comprise of fixed-response questions about different features in an organization. Cummings and Worley (2005) mention that because questionnaires are effective, they can be analysed quickly more so with the assistance of computers, therefore allowing for quantitative comparison and evaluation. A 5-point Likert scale was used during the study. A Likert scale is used to measure attitude in a scientifically accepted and validated manner (Joshi, Kale, Chandel and Pal, 2015). In a Likert scale, respondents have to indicate the degree to which they agree or disagree with a statement. Some statements will present positive attitudes while others will represent negative attitudinal objects under the study (Welman and Kruger, 2001). The Likert scale

was used in this study primarily because it is the most popular type of scale in the social sciences (Oosthuizen, 2006). This popularity is based on the fact that it is easier to compile this scale than any other attitudinal scale in the social sciences (Bhattacharjee, 2012). A Likert scale will be better suited for this study as it will also provide respondents with an option to be neutral on a matter thus allowing for more granularity (Bhattacharjee, 2012). The questionnaire used in this study was customised for the employees of manufacturing company, it is a self-administered, closed-respond questionnaire and was used to assess the level of corporate entrepreneurship at the manufacturing company.

## Pilot test

Prior to administering the questionnaire to the whole population, a pilot study was conducted. The purpose of the pilot test was to refine the questionnaire to make it easy and effective for respondents to answer the questions and there will be no problem in recording the data (Saunders, Lewis & Thornhill, 2003; 2009). Conducting a pilot test allow for misconceptions to be corrected and it gives the researcher an opportunity to discover how respondents feel about the survey and reaction to the user-friendly questionnaire (Field, 2005; 2009; Naidu, 2007; Creswell, 2014). The pilot study conducted was the initial practical step in understanding the role of corporate entrepreneurship at the manufacturing firm. Valuable insight was obtained as a result and the information was used to make necessary changes to the questionnaire before the survey can be administered formally to the rest of the population. The insight obtained included vagueness and sentence reconstruction. This was an important task because all employees needed to complete the questionnaire for this study. Out of the 55 questionnaires sent out, 32 were originally returned. The researcher intervened by requesting line managers to proactively assist by mentioning the surveys during the daily morning meetings, there was no incentive used to encourage the return of the surveys and eventually all questionnaires were returned.

## DATA ANALYSIS

### Findings in answering research question one.

The following research question will be answered: *How can companies use corporate entrepreneurship to gain competitive advantage?* To answer that question, analyses was conducted on statements that were directly related to answering this question. From the statement, 52.7% of respondents mentioned that they agree with the fact that management encourages them to develop idea that would improve the organization, 36.4% strongly agree with this statement. 49.1% of the respondents agree that the organization takes big risks to keep ahead of competitors, 10.9% of respondents strongly agree with the statement. A combined 94.5% of the respondents agree and strongly agree that the organization's managers have the skill, commitment, and courage to be effective intrapreneurs. With regards to training, 50.9% agree and 38.2% strongly agree that training is provided to ensure that innovative new processes are implemented effectively.

There is a significant, moderate, negative correlation between *management level and occasionally taking big risks to keep ahead of competitors* ( $r = -0.603$ ,  $N = 55$ ,  $p < 0.001$ ). This suggests that with an increase in management level, there will be an associated decrease in employee's ability to take risks. The relationship was further explored using the Kruskal-Wallis test, which indicated that there is a significant difference in respondents management level, and occasionally taking big risks to keep ahead of competitors ( $H(3) = 20.066$ ,  $p < 0.001$ )

On average the median measure for research question 1 was 4.00 (slightly agree), with a negative skewness of 0.439 indicating a skewness to the left. The average kurtosis was -0.123, this indicates a peaked distribution. These results indicate that most respondents reported their support that corporate entrepreneurship can be used to gain competitive advantage.



## Findings in answering research question 2.

The following research question will be answered: *How can factors influencing entrepreneurial behaviour in a small mattress factory be identified?* Statements aimed at answering that question were analysed and the following was observed. From the analysis, 43.6% of respondents disagree that individuals implementing successful innovative projects receive additional rewards and competition; only 3.6% strongly disagree while 32.7% may have chosen to opt out of answering the question by choosing the “neither agree nor disagree” option. 30.9% disagree with the statement that money is always available to get new project idea off the ground, 14.5% strongly disagree while 38.2% neither agrees nor disagrees with the statement. 52.7% of the respondents agree that organization provides employees with a chance to be creative and try out new methods of doing things.

There is a significant, moderate, negative correlation between *management level and individuals implementing successful innovative projects receiving additional rewards and compensation* ( $r = -0.525$ ,  $N = 55$ ,  $p < 0.001$ ). From this correlation, it can be assumed that an increase in management level will result in a decrease in individuals implementing successful innovative projects receiving additional rewards and compensation. There is also a significant, moderate, positive correlation between *money is often available to get new project ideas off the ground and organisation providing ample opportunities for learning and growth*. ( $r = 0.401$ ,  $N = 55$ ,  $p = 0.002$ ). An increase in availability of finance for new projects will result in an increase in opportunities for learning and growth.

By making use of the Kruskal-Wallis test, the relationship was further explored and found to be have a significant difference in respondents management level, and individuals implementing successful innovative projects receiving additional rewards and compensation ( $H(3) = 15.411$ ,  $p = 0.001$ ). The cross-tabulation between the two variables suggest that an increase in management level will result in a decrease in individuals implementing successful innovative projects and receiving additional rewards and compensation.

On average the median measure for research question 2 was 3.70, with a negative skewness of 0.110, average kurtosis is -0.101, this indicates a left skew and peaked distribution. From the statements used to answer this research question, three (3) statements have median value of 3 (neither agree nor disagree); these statements are: *Individuals implementing successful innovative projects receive additional rewards and compensation*, *Money is often available to get new project ideas off the ground* and *in this organisation effective intrapreneurs are generally rewarded*.

## DEPENDENT – INDEPENDENT VARIABLE CORRELATION

Correlation is a measure of association between two variables. The value of the correlation coefficient can vary from minus one to plus one. A minus (-) one indicates a perfect negative correlation, while a plus (+) one indicates a perfect positive correlation. A correlation of zero (0) indicates that there is no relationship between the two variables. For the purpose of this study, the following correlations are observed. There is a significant, moderate, positive correlation between *money is often available to get new project ideas off the ground and our organisation providing ample opportunities for learning and growth*. ( $r = 0.401$ ,  $N = 55$ ,  $p = 0.002$ ). A positive correlation implies that the two variables move together, as the value of one variable increases, the value of the other variable increases as well. There is a significant, moderate, negative correlation between *management level and occasionally taking big risks to keep ahead of competitors* ( $r = -0.603$ ,  $N = 55$ ,  $p < 0.001$ ). This means that when the value of one variable increases, the value of the other variable decreases. There is a significant, moderate, negative correlation between *management level and Individuals implementing successful innovative projects receiving additional rewards and compensation* ( $r = -0.525$ ,  $N = 55$ ,  $p < 0.001$ ). The two variables oppose each other, when one value increases, the other value decreases.

## RECOMMENDATIONS

The empirical study and conclusions drawn in the previous sections indicate that some entrepreneurial orientation is present in the organization, and that there is a sense of corporate entrepreneurship. The organization is operating in a dynamic and competitive environment, where entrepreneurial behaviour is crucial to explore opportunities and create a foundation for future success. To strengthen entrepreneurial orientation within the manufacturing company, the

following recommendations are put forward: It is recommended that the manufacturing company makes entrepreneurship the strategic way of thinking and include it in the formulation of values or vision of the company. Managers should focus their efforts on risk taking and such behaviour must be encouraged in the company. This can be done by constantly informing employees that such behaviour is acceptable, even if it evokes the image of failure. Innovative ideas and opportunities need to be turned into product and services. A system of recognition and rewards with specific reference to innovations. If entrepreneurial orientation is measured and rewarded, generally entrepreneurial orientation within the company will improve greatly. Continuously monitor the entrepreneurial process will eventually lead to a competitive advantage.

## **LIMITATIONS OF THE STUDY**

This study will contribute towards an understanding of how small companies can gain competitive advantage through application of corporate entrepreneurial principles. The use of questionnaire created a limitation in the research, the questions were selected based on a questionnaire developed by Oosthuizen (2006). Therefore, the establishment of relationships in the study serves only to discover certain patterns. The snapshot nature of the study presents a limitation. Study is also limited based on its concept nature, the concept of corporate entrepreneurship may not be properly understood by some respondents and some respondent's education level suggests they may not understand what corporate entrepreneurship entails. In addition, it must be taken into account that some younger employees only have a year or two of experience and may not have been exposed to constructs of corporate entrepreneurship.

## **SUGGESTIONS FOR FURTHER RESEARCH**

Based on the findings of the study, the following suggestions considered with regards to future research on corporate entrepreneurship in a bed mattress manufacturing industry. The study should be repeated after a certain time to determine if the recommendations have been effective in building corporate entrepreneurship within an organization. Future study should consider a survey developed by Oosthuizen (2006) that measures all the constructs of corporate entrepreneurship. More research should be conducted in the mattress industry due to the fact that corporate entrepreneurship is a new concept in this industry. Empirical study conducted on a population size above 150 participants, this will widen the scope of answer, strengthen the validity of the questionnaire and provide more diverse answers.

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# AN EVALUATION OF THE EFFECTS OF SOUTH AFRICA'S NATIONAL HEALTH INSURANCE PLANNING ON THE HEALTHCARE MANAGEMENT

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## ABSTRACT

*This study evaluates the effects of South Africa's National Health Insurance (NHI) planning on the healthcare management in Umtata region, South Africa. The central findings have shown that health is critical to the people of South Africa and the whole world at large and that the failure by the government to provide quality health services violates and undermines human rights and development. NHI requires the socio-economic status of the country to improve because as it stands there is no room for improvement given socio-economic and political crises in the country. More importantly, political seriousness is needed and policies should be clear and beneficial to the nation and not to politicians. A revision of some of the country's policies needs to be reviewed. During the process of interviews to the people of Umtata region, it has been discovered that NHI planning is not clear to the Mthatha local people. In conclusion, awareness campaigns and roadshows are needed to the people of Mthatha region so that they are made aware of the plan. Transparency in information dissemination is very much helpful to make any plan a success.*

**Keywords:** National Health Insurance, Planning, South Africa, Healthcare Management, Mthatha Region.

## INTRODUCTION

The gradual decline of South Africa's economy for the past years has led to an intense decrease in public health funding and deterioration in the distribution of healthcare services. Furthermore, the current healthcare system typifies that of the apartheid era where exclusion of the rural areas from the health care system was well pronounced. The main research question is: What effects does National health Insurance planning have on health care management in South Africa? The failure by central government to source and fund health care provision has negatively influenced poor social groups who do not have access to efficient and adequate public healthcare services. According to (USAID, 2011), the government of South Africa's spending on public health in 2009-2013 was \$US75 million against an estimated budget of \$US 250 million in 2013 indicating a serious and catastrophic deficit. (USAID, 2011) noted that Public Healthcare in South Africa has been hit hard by the country's economic and demanding social crises that the majority of the poor people are finding it difficult to access the much needed healthcare services. According to the Department of Health (2013), South Africa has always experienced national health funding challenges, as the government does not have a clear health funding strategy. However, funding challenges worsened around 2008-2011 when the global financial crisis (GFC) negatively influenced the country's financial system, causing a sharp dive on the funds allocated to the health sector. This meant that the health department could not finance all its tasks due to financial challenges Department of Health (2013). Provision of healthcare is vital to South Africa's economic growth since effective and efficient healthcare delivery ensures that health people add value by working long hours. Previously, South Africa had the capacity to deliver a comprehensive and a universally accepted healthcare service across the country but then this favored whites at the expense of the majority blacks and other minority racial groups. However, the current government's capacity to deliver comprehensive health services through National Health Insurance (NHI) to the people as is espoused in the freedom charter and in the bill of human rights is questionable.

## **PROBLEM STATEMENT**

The lack of a clear strategy and policy on how and who should fund the National Health Insurance is a problem in the Mthatha region. This is so because the district on its own does not generate enough revenue to fund, support and sustain the existence of a National Health Insurance at district level. This kind of situation has an impact on the allocation of the budget since each institution has to reach the set revenue targets if not, budget allocation will be reduced. This is evidenced by the fact that most districts in South Africa are funded directly by the National Treasury which approves provincial budgets on annual basis and subsequently, the province approves the allocation for each district. This has to do more with how the health system is modelled and how the current government has approached the health issue. The current government of South Africa inherited a working and a sound economy at independence, which needed little transformation so that it could accommodate and fund the health needs of the majority who were previously disadvantaged. This study examines the problems of planning of the National Health Insurance in Mthatha in the Eastern Cape Province. This is informed by the fact that since the government introduced the idea of the NHI, not much has been achieved. More so, this emanates from the fact that the people that are supposed to benefit from the NHI do not understand and know much about the idea and how it will benefit them.

## **LITERATURE REVIEW**

### **Rights-Based Approach**

The UNDP (United National Development Programme) noted that a rights-based approach seeks to analyze inequalities and unjust practices and distributions of power that impede development progress. It focuses on human development, political participation and human rights. The theory or approach is premised on the idea that poor states have no potential for human development. Inequitable societies are further characterized by elite capture of government and power. The Rights-Based approach argues that democratic institutions are necessary for sustainable development and seeks to secure freedoms, wellbeing, and the dignity of people (Sen, 2005). Sen (2005) postulates that health reform is concerned with rights in health services, character and distribution. Sen (2005) further argues that health reform interface with human rights because issues of health services' access and efficiency are vital in determining how people use their capabilities and freedoms as coping strategies during sickness. A rights-based approach is also critical of the role of the state in development. In a 2011 report, the Human Rights Watch notes that the National Health Insurance was state-centric and politically based and had nothing to do with the right health. The report noted that political processes that are violent and democratically deficient often have tendencies of violating rights of weak groups (Human Rights Watch, 2011). Questions arise as to whether the means used to address injustice were just. Gender and women empowerment groups have also slammed the health reform as reflecting gender bias by denying women genuine participation and access to health (Bhatasara, 2011).

### **Health Care Services in South Africa**

Despite programmes such as the Village/District Health Worker programme at community level being implemented, most rural villages are disorganized. Moreover, there are many public health-skilled associations that are confusing for many communities to approach. Some of these public health associations are divided along several organizations. Moreover, most public health workers in the country have no visible representation and this affects their operations and the interests of the workers. Most of those representatives that deal with employee personnel issues are not that active and that has affected the delivery of efficient public health services to different social groups in the country. There is further evidence of the unwillingness of the government to let NGOs, the private sector and donors take a front role in driving National Health Insurance. As such, the greatest failure by the National Health Insurance in South Africa is linked to lack of government willingness to engage the private sector, NGOs and donors willing to enhance an efficient and effective National Insurance mechanism. Moreover, another factor complicating the National Health Insurance has been the attention and priority provided to HIV/AIDS. The fact that the government has not been paying much attention to other pressing public health issues is enough evidence that the government's approach to a variety of public health issues is myopic. HIV/AIDS has been so much prioritized as a key target of the government that much focus has been taken away from other aspects of public health. In the 1980s, progress in the public health sector was

sustained by adequately financing the health sector and decentralizing health administration. By 2008, per capita health financing had drastically been reduced, complicating lives of ordinary people.

## **Benefits of Health Protection Framework**

Comprehensive drugs scope is regularly rejected from protection framework benefits. Numerous protection frameworks are produced with the essential centering around diminishing disastrous wellbeing consumptions, particularly those related to hospitalization. Nevertheless, given high out-of-pocket spending on pharmaceuticals, a protection scheme with no or constrained medications scope may not keep cost-instigated destitution from prescription drugs. The World Health Survey Information demonstrates that about half (41% to 56%) of families in LMICs spend the majority of their social insurance uses on drugs. Proof from high-wage nations proposes that higher medication out-of-pocket co-payments result in bring down use and poorer health results. This means lessening or dispensing with out-of-pocket prescription payments (Ostini, Hegney, Jackson, Williamson, Mackson & Gurman, 2009:543). The essential objective of a protection plan ought to keep up and enhance the soundness of its individuals by financing viable and productive social insurance. Guarantors need to proficiently and fairly adjust the contending destinations of adequate income era, designation of proper assets to expand wellbeing results given the necessities of individuals and arrangement of high caliber, convenient administrations at costs that are reasonable to the framework and to individuals (Hennessy, Bilker & Zhou & 2003:1497). Moreover, protection frameworks can utilize claims information to screen utilization of prescriptions with a specific end goal to outline and assess arrangements that advance well-informed utilization of medicines (Ostini *et al.*, 2009:541).

## **Improved Access and Utilization**

There is confirmed postulation that giving medical coverage can enhance buyer access and improve on the usage of pharmaceuticals, which leads to better health results. Studies analyze either the protection or those not insured within a community, or they consider prior use and utilize protection realities at a later stage. Wellbeing influences social improvement and monetary profitability in many ways like expanded solid individual response due to successful and proficient and commitment to more opportunity resulting from gainful exercises (i.e. less days off, longer work life traverse), a more extensive information base in the economy resulting from an expands future, a more productive "work life" and investment of funds because of a better and promising future and saving more for retirement, An expansion in labour constrain action. These advantages incorporate a more advantageous populace, which then converts into a gainful and viable workforce that develops neighbourhood businesses, draws in remote financial realities and develops the economy. A wellbeing public adds to better wealth creation. Every additional time of the future raises a nation's GDP for each individual by around 4% over the long term. A significant reduction among grown-up mortality reveals a 10 to 15 percent of the financial development that took place from 1960 to 1990 for 52 nations (Hennessy *et al.*, 2003). Without addressing the social determinants of health at grassroots level, it remains difficult for the country to have an effective and efficient National Health Insurance. This is evidenced by countries whose health sectors have played a significant role in human development (WHO, 2010).

## **National Hybrid Health Insurance**

National hybrid health insurance NHHI refers to any government-managed insurance plan, or set of plans, seeking to enrol the entire population, financed by any mix of general tax revenues plus contributions, and having the aim of removing the financial barriers to UHC (World Health Organisation, 2009). Health insurance is a financing mechanism that generates and pool funds to cover health care costs for members of the plan. In virtually all countries with NHHIs, governments have had notable success in enrolling and collecting premiums from formal sector and civil sector employees. However, enrolment and provision of benefits to informal sector workers, subsistence farmers, the indigent, and others is often quite low. While employers often supplement employee contributions, and government pays a share of the insurance premiums for civil servants, these two groups typically make up only a small percentage of the total population. In developing countries the bulk of working age adults is comprised of the unemployed, subsistence farmers, and those working in the informal sector.

## Public and Private Sectors in South Africa

The development discourse in the developing world, especially in Asia and Sub-Saharan Africa, has been based on urban-rural divide that has influenced health access to many in most rural parts of these two sectors. Whilst health access in most Sub-Saharan Africa is based on the role of economic development, not much has benefited rural areas despite the fact that these areas are much more discriminated in terms of service delivery, creating a situation where urban areas draw benefits at the expense of rural communities. This has resulted in worse poverty situation in the rural parts of Africa, while urban areas have enjoyed a considerable boom (Batasara, 2011). Many studies (Kevin & Obima, 2013; Sanders, 2010) point to the strong link between health access and poverty reduction, which has not witnessed rural areas benefiting since all the benefits have concentrated development efforts in urban centers. This informs rural-centered advancement techniques where efficiency increases must be the reason for national financial development and the instrument for mass neediness, lessening and sustenance security” (World Health Organization, 2009). Despite the success of the Green revolution in Asia, which, despite it being agricultural, brought many benefits to the health sector in sub-Saharan Africa. For South Africa, the hope was that economic development would be brought about by a large-scale industrial revolution as was pioneered by Kwame Nkrumah during the early years of Ghana’s independence (1957-1966). It was hoped that with the achievement of the Green revolution in Asia, a comparative health expectation was to be effected on African economies (Sen, 2005).

## METHODOLOGY

### Research Approach Applied

The research was qualitative or phenomenological in nature. The word qualitative, according to Bryman (2004), Babbie and Mouton (2005) and Wilson (2010), implies an emphasis on the qualities of entities and on processes and meanings that are not experimentally examined or measured in terms of quantity, amount, intensity, or frequency. Using guides from Babbie and Mouton (2005), the characteristics of the research design was that it was naturalistic and exploratory, meaning that the researcher was open to whatever emerges and did not manipulate or control the responses and findings to meet predetermined expectations. The researcher avoided rigid designs that eliminate responsiveness and pursued new paths of discovery as they emerged. It was a purposeful study because the respondents selected were regarded to be ‘information rich’ on the research area (Zikmund, Babin, Carr & Griffin, 2010).

Sekaran and Bougie (2009:22) argue that a rigorous research design is crucial in achieving results that create a platform for effective decision making and hence organisational survival and sustainability or well-being of the public using the model. The researcher began the study by focusing on the research problem and reflecting on the problem and its relevance to the organisation. The question asked at this stage was: ‘if the research was done what significance would the findings have in addressing the problem’. Greater clarity on the complexity of the nature of the problem was achieved by undertaking the initial review of literature (Neuman, 2005; Collons & Hussey, 2009; Kumar, 2011). The reviewed literature enabled the researcher to find valuable information which helped in the development of frames of reference for the research, and crystallising the specific areas of the research. This was followed by an intensive literature review to gather ideas from prior researches and expert opinion on critical success factors of Public private partnerships. The research used interviews to gather data. In this case, 12 individuals were used as a unit of analysis. Data has been collected from each individual and each response has been treated as an individual data source.

### Population

According to Strydom, (2005), a population consists of all those cases or units from which the actual sample of any research is drawn. This means, that the population is not limited to only human beings, but might include units like schools, health institutions and organisations. The population for this study constitutes all the people from the region of Mthatha in the Eastern Cape Province of South Africa and it is from this population that the sample for the research will be drawn from.



## **Sample and Sampling Procedure**

The target population will comprise of host communities (households), policy makers, non-governmental organizations, local authorities, central government and traditional leaders from the province. The selection of the two provinces is premised on the database of the World Health Organisation and the Department of Health whose mapping indicates that the mentioned province heavily suffers from poor health outcomes. An in-depth purposive interview will be carried out with 12 selected key-informants dealing with Health issues in the selected province. The following key informants will include local authorities (2), NGO Agencies (3), Health Department Officials (4) and the Provincial Government (2), State Government (1) would participate in the study. About twelve interviews purposively sampled will be conducted. To inculcate a balanced study, the nature of the discourse problem requires a cross-sectional representations, horizontally across the communities and vertically across social structures, which will guide the selection of the sample.

## **Instruments for Collecting Data**

The data collection instruments will key-informant interview, focus group discussions and article reviews. The key-informant interviews and focus-group discussions were administered by the main researchers.

# **DATA COLLECTION METHODS**

## **Interviews**

Interviewing policy and decision makers from the Office of the Premier formed a basis for qualitative data that will be gathered for this research work. Yin (2009) states that an interview is a form of direct communication whereby a researcher asks his/her participants questions and keep a record of the answers. Saunders, Lewis and Thornhill (2012) differentiates between the three types of interviews, namely, structured, semi-structured and unstructured. As in the case of questionnaires, the interview guide was constructed from existing published knowledge.

## **Secondary Data Collection Methods**

The secondary data sources that the study used include previous research reports, frameworks, methodologies, books, journal contents as well as government reports and publications. As previously, stated, secondary data simply refers to uncovering information that has already been compiled in some form by another person. Today, the internet has become a wealth of such information. The challenge of course is to construct the searches and questioning lines that will return the most relevant and current information. This study, therefore, examined previous literature that looked on the field health in the public sector.

## **Sampling Procedure**

The researcher used non-probability methodologies. A non-probability sampling methodology is a method of selecting participants without knowing the chances of choosing participants because the researcher does not know the population size or members of the population (Wilson, 2010). Specifically for qualitative approach, the researcher will utilize non-probability methodology, the specific sampling technique that will be used is purposive sampling technique. This is where the researcher biasedly selected the samples that have the desirable attributes he wished to investigate (Wilson, 2010). Purposive sampling as defined by Creswell (2009) is the selection of study units wherein the researcher is deliberately involved in handpicking the participants in line with certain attributes deemed as crucial to the carrying out of the study. Purposive sampling may be used to select participants since the researcher was looking for certain characteristics to qualify eligibility into this sample such as position held and/or academic background.

## DATA PRESENTATION AND ANALYSIS

Saunders (2010) felt that men dominated the African society at all levels in the past, but that has since changed in view of laws supporting equity between genders. He adds that despite major efforts towards equity in employment, the health industry is still one area that is still male-dominated. In this study, the broad scope of the age range of the participants allowed the researcher access to diverse perspectives. This was so, because participants with varied ages had varying lengths of time of exposure to issues related to the National Health Insurance at different stages of their life and had different understandings of the whole scope of the NHI. It was observed that the nature of understanding on the National Health Insurance was the same across all age ranges whilst the responses to goals of the NHI planning differed for young and older participants. Younger participants were noted to be very clear of the intentions of the NHI and what it aims to achieve, while the older participants had doubts as to what really was NHI. Younger participants were classified as falling below 35 years of age whilst older participants were defined as those above 35. All the participants were drawn from Mthatha's ward 12 and 17. The advantage of the spatial location of the participants though, was that it directly meant the participants had diverse socio-economic backgrounds and as such diverse cultural and value systems within those groups from which they originated. This study has revealed that the understanding of the terms "wellbeing" was taken in different context depending on upbringing and the exposure of the individual. This, it was observed, was significantly influenced by culture and background. Regarding family strength, and the level of dependence of family members, this research showed that though a reasonable fraction had dependents in the form of children, some participants did not have children. A great majority of the participants were concerned about the future of their children, when they wondered what tomorrow would bring. This, they claimed created a lot of concerns resulting from the plight of their children. The need for security and wellbeing created serious concerns.

In this study, men were more self-expressive than females. It was more pronounced given the concerns expressed by men as compared with those expressed by women. It was observed by the researcher that the men seemed to view NHI as a facility to benefit women but not necessarily men. A participant claimed that NHI was mainly of benefit to women and not to men. The researcher interpreted this to mean that the male participant was referring to the issue of child delivery as it is a women affair as it is women who give birth. Here again, African culture plays a major role in the minds of such approach. This was proof to the researcher that even among pioneers and social professionals, culture plays a major role. It is the researcher's view that this situation of financial non-availability is a common event in the rest of the African continent. The discussion dealt with a few points and discussed a given point at length, where the researcher took advantage of this situation and discussed the research issues in detail. Those who had used NHI for longer periods were better equipped than others and seemed more informed of the practical advantages.

One participant uttered: *"When I started working as a junior nurse, it used to be that African men when asked if they had health cover, they would pretend as if they had it, yet in actual sense, they had not."* The above participant clarified to the researcher how culture influences men to take wrong decisions. Ingram (2010) reported that among Latino men, help seeking was deterred by the fact that in their culture, a male prefers to deal inner issues alone.

### Discussions Pertaining to NHI's Influence

Seventy percent of the individual participants claimed that planning of NHI in Mthatha is very poor without clear justifications. According to the interviews, NHI planning has a non-functional approach resulting from its activation in Pretoria at the National Department of Health (Pretoria), and managed with a few consultant in the Eastern Cape Province. It is not cognizant of the situation on the ground in rural areas like Mthatha. Most people were of the view that while it is a noble idea, the fact that they have not been part of the planning of the NHI made them doubt the success of the whole noble idea. One of the participants reported: *"The National Health Insurance is a good idea, but we feel we should also have inputs that would contribute to the whole package before it is unveiled when it is planned from Pretoria"*. Financial inconsistencies, dissimilarity in livelihoods were distinguished features of the NHI planning shortcomings. Most of the members were skeptical about clear benefits of the scheme and needed forehand clarifications (Gray & Vawda, 2016). Most members of the focus group confirmed having no influence over their "little" contributions, four of the members showed that they had thought of how they could contribute to NHI benefits, though seven demonstrated they could spend it on NHI in the event that it turns into a necessity that citizens subsidize it. Other members of the focus group expressed dissatisfaction with their salaries, but were slightly contented, though

unsure as to whether they would support the insurance or not. This of course depends on when the scheme would be launched. Further, views were expressed to the issue of the amount required for contribution. The non-availability of workshops on the topic was a setback. A number of people expressed the need for workshops. Still other views pointed to requiring the government to fund the NHI project due lack of funds. They claimed they have other equally pressing requirements. According to Kervin and Obinna (2013), the nearness of help is of critical capacity to the understanding of government designs. Kervin and Obinna (2013:23), claim that most African governments fail to support their citizens due to poor planning with unachievable goals. Many participants expressed concerns over their unwell defined future with regard to their ability to pay for their NHI and wished for payments to be made by other tax payers. It was observed that most of the participants were disadvantaged by little knowledge on the subject of health insurance. The researcher, however, noted a relationship between reaction and level of knowledge.

## CONCLUSIONS

The findings obtained have shown that health is critical to the people in the target population in particular, to South Africans in general and also to the whole world. Thus, any decision by the government to negate the provision of quality health services further violates human rights of the community members and undermine human development. The study established that funding has been a major hindrance to provision of the National Health Insurance services. Furthermore, other challenges include lack of essential services, dilapidated infrastructure and shortages of essential drugs in rural hospitals. These shortcomings can be traced back to the government's failure to be practical about the health plight of its citizens. The implication of this, is the failure to receive revenue in the form of taxes, which could be used to fund NHI. More so, funding despairs continue to undermine government efforts. Currently, there are no government social insurance provisions for the health wellbeing of the people of Mthatha. There seems to be no clear procedure of providing health insurance services to the people of this community. The analysis has shown that the system does not fulfil its health obligations to the community. Similarly, as with whatever remains of general society, organization, the Public Finance Management System (PFMS) needs to be resolved in an amicable way. There is poor government initiative towards the health wellbeing of the people in the community. There is serious lack of community awareness with regard to the NHI contribution for the benefit of the people. The community has its failures concerning the health insurance issues, which have roots associated with the cultural beliefs of the members. Men believe that health insurance is meant for women, apparently because it is women who give birth. The community is beleaguered by financial problems which results from poor salaries. The planning of NHI by the government is bound to fail due to the government's failure to involve the people who are supposed to benefit. Community members feel they should contribute from the planning state to community awareness. There are gender-oriented issues which should be addressed through meetings (*Imbizos*) which should be arranged to smoothen out misconceptions regarding the benefits of the programme. The Community feels cheated by the government for taxing them and as well confronting them to pay for NHI services.

## RECOMMENDATIONS

The researcher has realised that there exists a credibility gap between the government of the day and the community members in the target population. There is dire need for the government to meet the people it is supposed to be ruling/leading on a more frequent basis to listen to their views and grievances concerning health issues. These meetings should be arranged with agendas of educating the people of socio-economic, cultural, health and several other issues. An issue at hand is the one of health insurance which is meant to improve the health wellbeing of the people. This paper has revealed that the community is not financially capable of paying for health insurance and as well fend for their lives, taking care of their respective families. The government must adopt a cost-sharing policy towards NHI and contribute towards the kit. In order for the NHI programme to succeed, there is need for the system to neutralise the opposing factors which interfere with community members contribution towards the fund which are; cultural beliefs, gender-based considerations and marital committal misconceptions. There is a further requirement that planners of the NHI programmes must include the community even at the grassroots planning stage. The government must review its policies towards the implementation of any programme especially if it requires people to contribute, however noble it may be.

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# CIRCULAR ECONOMY: A BIBLIOMETRIC ANALYSIS AND ITS APPLICATION IN THE HOTEL INDUSTRY

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## ABSTRACT

*The concern over sustainability, among stakeholders has progressively emerged in the last decades, and so an urgent need to respond to these challenges has arisen. The ongoing linear economic model is being challenged by its own context, and a considerable change in this operating system is crucial. The concept of Circular Economy (CE) is a new approach to sustainability, as a restorative strategy in industrial economy in order to face the environmental and economic challenges of this century. This article provides an analysis of the relevant literature on Circular Economy (CE) theoretical approaches and its underlying principles, origins, intrinsic models, enablers and constraints, and is an attempt at contributing with an in-depth understanding of the concept, as well as its approaches to the tourism hotel industry.*

**Keywords:** Circular Economy Concept; Circular Economy Evolution, Tourism, Hotel Industry.

## INTRODUCTION

### Circular Economy and the Tourism Industry

Over the past decades, tourism has been developing not only as an economic activity, as destination regions offer so much more than just products and services, it is an industry in which nature, cultures and history play key roles. It has become one of the best positioned industries to drive economic growth that most contributes to the countries' GDP (Gross Domestic Product). Understanding how this complex industry functions is essential to engage in sustainable and prosperous management strategies.

Taking insights in the OECD Tourism trends and policies (2018), it becomes evident that tourism is one of the biggest and booming industry in the world. It is responsible for job creation, export income, adding domestic value directly, on average, 4.2% of GDP, 6.9% of employment and 21.7% of service exports in OECD countries. The tourism sector plays a key role in the Portuguese economy as it is the industry with the highest growing rate, representing 16.7% of total exports and 48.3% of services exports during 2016.

The global economy pattern, and inherently in the tourism/hotel industry, is based on a linear model of production and consequently of consumption in which products are used for a short period of time and then discarded, resulting in massive waste. This process implies that a system based on a consumption model at the expense of a

sustainable use of natural resources may lead to compelling costs along the supply chain. The Circular Economy (CE) appears as a solution, by aligning economic development with sustainable use of natural resources. The CE concept and its origins are following described.

## LITERATURE REVIEW

### Circular Economy: the concept and its origins

The concept of CE and its origins are traced back to different schools of thought, different authors and dates, which means that the doctrine underlying it has existed for hundreds of years but only decades ago, was put to discussion. The CE concept draws on epistemological fields as biology, economy, and ecology providing “umbrella constructs” (Hirsch and Levin, 1999:199) such as ‘circular flow of income’ (Quesnay,1758), ‘industrial metabolism’ (Simmonds,1862), the ‘spaceman economy’ (Boulding, 1966), ‘limits to growth’ (Meadows, Randers, Meadows, and Behrens, 1972), ‘cradle-to-cradle’ (Stahel and Ready-Mulvey, 1981; McDonough and Braungart, 2002), ‘industrial ecology’ (Frosh and Gallopoulos, 1989; Graedel and Allenby, 1995), ‘regenerative design’ (Lyle, 1996), ‘remanufacturing’ (Steinhilper, 1998), ‘natural capitalism’ (Hawken, Lovins and Lovins, 1999), biomimicry (Benyus, 2002), ‘eco-effectiveness’ and ‘eco-efficiency’, (McDonough and Braungart, 2002; EMF, 2012), ‘steady state economy’ (Daly, 2005), and ‘performance economy’ (Stahel, 2010).

CE has commonly been associated with an economy approach to relevant waste management strategies, which stands out as a very reductive perspective. Moreover, Geng *et al.* (2014) consider that a preventive and regenerative eco-industrial development ought to be implemented, along with ‘green’ technologies, the design of alternative solutions, and the synergies between manufacturing processes, the environment and the economic system in which it is enclosed. By doing so, material would be regenerated, and energy recovered. In this way, CE would allow the understanding and the application of new practices to achieve the long-awaited sustainability.

According to Murray (2015), as early as 1758, François Quesnay, introduced the concept of *circular flow of income*, inspired by the work of William Harvey (1628) and Marcello Malpighi (1661) on blood circulation. The circular flow of blood around the body was viewed as a useful metaphor for the inputs and outputs of money through an economy. In 1848, Hofman, declared that in the perfect chemical factory, waste cannot be found, only products, meaning that a real factory employs its waste, and the closer it gets to this assumption, the biggest is the profit.

Moreover, in the early decades of the 19<sup>th</sup> century, the term *industrial metabolism* was coined, and Simmonds (1862), shared the same perspective of nature behaviour towards zero waste, as he perceived that in nature that nothing is wasted, but every substance is reconverted are reutilised. Ideas that are in the base of the CE principles.

In the early decades of the 20<sup>th</sup> century, and especially after World War II, the global economy accelerates, and the prevailing model which implied extracting resources, using them in the manufacture and production processes, sell them in large scale and finally discard them after usage, leads to massive waste production. Concerns about environmental pollution, waste management, resource depletion, and limits to growth became severe, leading governments around the world to initiate waste reduction and recycling programmes. Taking into account the mechanization of daily life along with the development of steam engines and consequently of railways and electrical equipment, a new and different form of recycling emerged, later known as *remanufacturing*, i.e. enduring products are repaired and revived to an almost new condition (Steinhilper, 1998).

By the same time, the concept of *industrial symbiosis* (IS) emerges in the literature (Parkins, 1930; Fischer-Kowalski and Haberl, 1998), and along with the concept of *industrial metabolism* (IM) (Simmonds,1862), became the focus of scholars, and years later are considered the pillars of the recent sustainable economic movement, *industrial ecology* (IE), firstly articulated and converted into an academic field by Frosch and Gallopoulos (1989). Along with other advocates of IE, the environmental economists Pearce and Turner (1989) coined the concept of *circular economy system*, shaping previous research conducted by the ecological economist Kenneth Boulding (1966) and pointing it as a closed system creating synergies between economy and environment. Boulding’s studies introduce the economic system as the *open cowboy economy* (1966), contrasting it with the engaging *spaceship economy* (1966). This theory was later matured by Stahel and Ready-Mulvey (1976) highlighting the concept of *closed-loop economy* (Murray *et al.*, 2017) and its impact on job creation, economic competitiveness, resource savings, and waste prevention.

The 70s were fruitful regarding environmental movements, and consciousness concerning the environmental costs of economic progress and the quest for a cleaner, safer environment, that would enhance the quality of life, carried momentum. It's in this atmosphere that the 3R imperative of 'reduce, reuse and recycle' received growing attention. Governments regulate and implement policies to deal with the challenging growth in industrial activity, solid waste production and landfill, not considering waste prevention. Landfills and incineration facilities represent a waste management strategy, as well as treating waste abroad or sending it to less prosperous countries (Moyers, 1991). In a scenario of socioeconomic development, with a growing world population, especially middle-class, the crusade for resources increases promptly. And as, Meadows *et al.*, (1972) put it, natural resources are not unbounded, which means that this exponential economic growth, the raw material resources and energy, and humanity's metabolism is unsustainable and represents an environmental and economic challenge. Therefore, considering the underlying limitations of the dominant economic model, the linear economy, the first steps towards what will be coined as Circular Economy, are taken.

One of the first definitions of the CE concept is associated to Pearce and Turner (1990) as stated by Su *et al.*, (2013); Ghisellini *et al.*, (2016) and Geissdoerfer *et al.*, (2017), who consider the significance of natural resources on economic systems and the impacts of linear economy, in which it is assumed that natural resources are abundant and that Earth has an unlimited capacity for assimilation of pollution (Cooper, 1990). In this context, a CE perspective is proposed as a means to promote circularity within the economy, by reducing the inputs of energy and raw materials consumption, which are indispensable for sustaining future resource preservation (Hilsop and Hill, 2011). Feng *et al.* (2007), Greg and Doberstein (2008), Yang and Feng (2008), Hu *et al.*, (2010), refer to CE as a model of economic development which mimics the ecological circulation of raw materials, 'closed materials cycle or resources circulated economy', respecting the ecological laws and the flawless utilization of natural resources in order to accomplish economic development, improvements in resource productivity, optimization or equipment revitalization and management upgrade.

Considering the adoption of a 'cradle-to-cradle' approach, while preventing losses of useful materials along the production and consumption chains, it allows a mitigation of the production costs for the businesses and at the same time would allow to endeavour towards more holistic waste management strategies (Mirabella *et al.*, 2013; Geng *et al.*, 2010), as well as a depletion of the externalities (pollution) and new employment opportunities (Ellen MacArthur Foundation (EMF), 2012; Club of Rome, 2015). Additionally, the reliance on natural resources and raw materials for production purposes (materially closed system) running on non-renewables poses huge constraints on economy as it is exposed to the negative effects of resource prices and volatility (EMF, 2012; Preston, 2013; Lett, 2014). Circular Economy strives to harmonize economy, environment, technology and social approaches (Feng and Yang, 2007; Greg and Doberstein, 2008; Ness, 2008; Mathews and Tan, 2011; Lett, 2014; Lacy and Rutqvist, 2015; Ren *et al.*, 2013). This unique business model, CE, steps up innovative employment opportunities (EMF, 2012; Stahel, 2014) and seeks future generations' wellbeing regarding resource access and purpose. Table 1 illustrates the CE Roots and its evolution.

**Table 1: CE concepts, evolution and author's inputs.**

CE Concept and its Evolution	Author's Inputs
Circular Flow of Income	François Quesnay, 1758
Industrial Metabolism	Simmonds, 1862
Spaceman Economy	Boulding, 1966
Limits to Growth  <b>CE 3-R Principles: Reduce, reuse, and recycle</b>	Meadows, Randers, Meadows, and Behrens, 1972  Daly, 1977; Karl-Henrik Robèrt, 1991; Cooper, 1994; Yoshida, 2007; Larson and Taylor, 2000; Andersen, 2007; Clapp and Swanston, 2009; Bilitewski, 2012; Hassini <i>et al.</i> , 2012; Jiao and Boons, 2014; Ghisellini <i>et al.</i> , 2014; Yan and Feng, 2014; Diener and Tillman, 2015; Kasidoni <i>et al.</i> , 2015; Reike <i>et al.</i> , 2018.
Cradle-to-cradle	Stahel and Ready-Mulvey, 1981; McDonough and Braungart, 2002
Industrial Ecology	Frosh and Gallopoulos, 1989; Graedel and Allenby, 1995; Ehrenfeld and Gertler, 1997



Regenerative Resign	Lyle, 1996
<b>CE 7-R Principles: Rethink, refurbishment, remanufacture, repair</b>	Thierry <i>et al.</i> , 1995; De Brito & Dekker, 2003; Fernández and KeKale, 2005; King <i>et al.</i> , 2006; Gehin <i>et al.</i> , 2008; EMF, 2010, 2013; Liu <i>et al.</i> , 2009; Stahel, 2010; Hultman and Corvellec, 2012; Bastein <i>et al.</i> , 2013; Wijkman and Skånberg, 2015; Lieder and Rashid, 2015; Reike <i>et al.</i> , 2018
Natural Capitalism	Hawken, Lovins and Lovins, 1999
<b>CE 8-R Principles: Redesign/ Rethink, Cradle-to-cradle, Long-lasting Product</b>	Cooper, 1999; Nakajima 2000; McDonough and Braungart, 2002; McDonough, 2002; EMF, 2012; Stahel, 2013, 2014, Reh, 2013; Prendiville, <i>et al.</i> , 2014; Geissdoerfer <i>et al.</i> , 2017
Biomimicry	Benyus, 2002
<b>CE 9-R Principles: Refuse</b>	Miller and Spoolman, 2002; Clapp and Swanston, 2009; Black and Cherrier, 2010; Alwood <i>et al.</i> , 2011, Bilitewski, 2012; Kasidoni <i>et al.</i> , 2015
Eco-effectiveness and Eco-efficiency	McDonough and Braungart, 2002; EMF, 2012
Steady State Economy	Daly, 2005
Performance Economy	Stahel, 2010
<b>CE 11-R Principles: Repurpose, recover</b>	Li, 2011; Stahel, 2010; Yan and Feng, 2014; Reike <i>et al.</i> , 2018

## The Circular Economy's R Principles

### Reducing, reusing, and recycling

CE encapsulates all the activities related to the processes of reducing, reusing, and recycling materials, and also to distribution and consumption of these materials. It is acknowledged that resources ought to be processed in cycles, by means of biogeochemical processes or by human interference (one of the principles of CE), otherwise environment and consequently health care will continue to degrade at an astonishing pace (Karl-Henrik Robèrt, 1991). Cooper also (1994) also advocates that governments introduced recycling goals for domestic waste but lacked practical steps to encourage manufacture and sale of longer lasting products. This means that awareness regarding activities that enclose reducing, reusing and recycling were increasing, however, there was an urgent need to focus on the ultimate destination of consumer durables and also packaging.

Furthermore, CE cannot perpetuate recycling, as in a certain stage recycling may become too difficult and onerous, because the amount of waste produced is not at the same level of the resources depleted, i.e. the economic system is open-ended (Andersen, 2007). The amount of energy and matter prevail constant in a closed system, where the volume of waste generated ought to be equivalent to the amount of resources drained, and part of the waste would be converted into raw material. By doing so, economy becomes circular, which implies that material outflows as well as economic assets need to be taken into consideration.

Reike *et al.* (2018) also introduced the imperative 'refuse', a concept that largely depends on two different perspectives, the consumer and the producer, i.e. the consumer is able to choose to buy smaller amounts of products or use them less (Miller and Spoolman, 2002; Black and Cherrier, 2010; Alwood *et al.*, 2011). 'Refusing' can also allude to the refusal to accept packaging or bags whenever they represent waste (Clapp and Swanston, 2009; Kasidoni *et al.*, 2015). When the concept is applied to producers, the approach of *Concept and Design Life Cycle* implies that designers have the option to refuse to adopt production process, which involve waste outputs, and the use of perilous raw materials (Bilitewski, 2012).

## Redesign - Cradle-to-cradle - Long lasting Products

Different solutions were required considering the nature of what was discarded, as some consumer goods undergo a complex process of construction and may contain dangerous and highly polluting substances. Despite the fact that Circular Economy is commonly associated with the ‘recycling’ imperative, it is crucial to clarify that this may be the least sustainable answer to address sustainability when compared to the other R – imperatives concerning resource efficiency and profitability (Stahel, 2013, 2014). Some residuals are only recycled to a certain point and others are not recyclable at all. Fibbers can be recycled 4-6 times, whereas some metals cannot be recycled at all and are considered “unlimited manifold recycling” (Reh, 2013); some types of plastic cannot undergo recycling processes due to the presence of impurities as ink or metals (Prendiville *et. al*, 2014).

In order to achieve balance, environmentalism, industrialism, and design ought to align strategies and think differently about what the concept ‘eco-friendly’ stands for when addressing manufacturing processes. Another feature considered (McDonough and Braungart, 2002; EMF, 2012) was a new scientific and design oriented approach, coined as ‘eco-effectiveness’, and renounce to the modern manufacturing practice of ‘eco-efficiency’, as an approach of minimization and dematerialization of the material flow system. CE should target ‘eco-effectiveness’ and acknowledge the transformation of products considering a balanced exchange between environment and economy.

In addition, McDonough and Braungart, (2002) expose some misinformation about ‘good’ environmental practices, such as recycling and advise manufactures to encircle a ‘cradle-to-cradle’ design concept, rather than a ‘cradle-to-grave’ life cycle, i.e. the life cycle of a product mustn’t end in a ‘grave’, the equivalent to a landfill. In a ‘cradle-to-cradle’ manufacturing model, products are designed and manufactured with new purposes and ‘long-lasting’ design already considered (Geissdoerfer *et al.*, 2017), and undergoing a waste-free industrial process. In this respect, CE does not emerge only as a preventive approach (McDonough, 2002), with the goal to diminish resource depletion and emissions of waste, as it considers the articulation of the link between environment and industry (Cooper, 1999; Nakajima 2000). It goes far beyond the concept of sustainability, outlining that questions of efficiency through design and service supply ultimately implies a reduction in inputs, improving resource usage and economic growth from natural resource depletion. In order to do so, policies should focus on three main strategies ‘low consumption of energy’, ‘low emission of pollutants’, and ‘high efficiency’, (UNEP Paris Report on CE, 2006).

In order to achieve higher competitiveness, Stahel (2010) considers that economic stakeholders ought to engage in strategies to lessen resource consumption without increasing the costs of waste emissions and consequent environmental risks, and thus contribute to sustainable development. Mathews and Tan (2011) also advocate that eco-industrial initiatives, which consider industrial circularity by transforming waste, in a certain production stage, into a valuable chain input at another stage, is arousing interest as an approach in dealing with the sustainability of industrial businesses.

## Rethink, refurbishment, remanufacturing, repair

The Ellen MacArthur Foundation (2010) materializes as a requirement to respond to the ever-increasing need to rethink, redesign, and build a positive future, as the linear economic model based on the ‘take-make-dispose’ perspective is leading to resource depletion. CE is restorative and regenerative by design, and aims to keep products, components and materials at their highest utility and value at all times, distinguishing between technical and biological cycles, i.e. develop an economic system where long-lasting design, reuse, refurbishment, remanufacturing, and recycling of products and materials is contemplated. In practical terms CE cannot guarantee 100% recycling (Andersen, 2007), as also pointed out by Daly (1977) who proposed the impracticability of an economic system to be completely circular with waste, residues, products and energy circling back as raw materials, due to the entropy law. It features a new economic model, where products, energy, and services are transacted in ‘closed loops’ or ‘cycles’, mimicking natural ecosystems, where toxic chemicals are disposed of and there are no waste emissions, as waste flows represent valuable resource (EMF, 2012), a principle already pointed out by Liu *et al.*, (2010) so as to reduce the use of natural resources and the environment impact. It is reiterated that an economic and industrial system rooted on the ‘reuse’ imperative of products and raw materials, outlining that remanufacturing, will reinforce the natural capacity of the environment to restore itself (EMF, 2013; Bastein *et al.*, 2013).

It is also argued (EMF, 2015) that the implementation of CE should consider system thinking, since decision making of the actors (entrepreneurs, companies, and governments) involved in manufacturing processes have an enormous impact in the value chain. The EMF (2015) further acknowledges decoupling of the economic system from resource consumption as one of the main goals of a circular economic system, the focus has to be put on value retention and as Stahel (2013) put it, also focus on stock optimization and product-life extension for goods. In a restorative by intention and design industrial system, the focus should be placed on use and reuse of products rather than on discarding them before their value is fully exploited (Wijkman and Skånberg, 2015; Waste Resource Action Programme (WRAP), 2016).

Reike *et al.* (2018), consider ‘refurbish’, and point out that is used when products undergo an upgrade process, i.e., parts and components of a larger structure must be replaced in order to lengthen the product’s life cycle (Brito & Dekker, 2003; Fernández and KeKale, 2005). Considering ‘remanufacture’, these authors considers that it defines the process of repairing the structure of a product. It considers inspection, product disassembling, cleaning, and repairing, through an industrial process in a controlled environment (shop, factory) (Gehin *et al.*, 2008; Liede and Rashid, 2015). As for ‘repair’, it is referred that it highlights the requirement to prolong the lifetime of products (King *et al.*, 2006), by repairing parts (Stahel, 2010), or making small adaptations (Thierrry *et al.*, 1995). These life extension processes can be performed by different actors (owners, technicians, and repair businesses) without undergoing a change of ownership process (Hultman and Corvellec, 2012).

## Repurpose, recover

Regarding ‘Repurpose’, sometimes used as ‘rethink’ (Li, 2011), Reike *et al.* (2018), consider that it is commonly applied to the strategy of using discontinued or obsolete products and components and give them a new purpose, another function, allowing these discarded furnishings to enter the life cycle once more (Yan and Feng, 2014). In Stahel’s (2010) opinion it may also refer to the extraction of materials or components of end-of-life composites. By using discontinued components/ materials adapted to different functions,

‘Recover’ or ‘Re-mine’, are concepts commonly neglected and misreclected when considering the CE principles. As argued by Reike *et al.* (2018), this imperative refers to the “retrieval of materials after landfilling phase (Yan and Feng, 2014).

A broad and systematic approach at creating clarity on the use of the R-hierarchies is relevant for successful CE implementation, as some R-imperatives represent a natural result of the laws of physics, although others are associated with the prevailing economic model of developing countries.

## CE IN THE TOURISM/HOTEL INDUSTRY

As discussed previously, the transition to a circular economic model is a multifaceted and complex process, as it involves innovation and transformations within different areas like economy, culture, politics, and societal, of the prevailing linear economic system. The implementation of the CE principles in the hotel industry or developing a circular tourism economy could bring to light and enhance the sustainable use of resources, as well as a reasonable and viable provision of accommodation, food supply, wellness services, energy and water flows (Manniche *et al.*, 2018).

The tourism sector has not focused neither put much effort into CE initiatives nor exploited possible future paths concerning a practical exploration of the concept. It is acknowledged that a shared understanding of the concept has yet to be conducted, subjected to conceptual framing and practical exploration. Nonetheless, the EMF (2013), examined closely the consumer goods sector in order to determine underexploited opportunities for circularity, concluding that goods as furniture and washing machines are priority products. Taking into account that accommodation and laundry play key roles in the tourism sector, it is proper to conclude that this area should endeavour towards Circular Economy. Food, transport, building and construction, furniture are commodities related to the tourism industry (Hislop & Hill, 2011), it’s imperative to bring about a comprehensive circular approach to the sector, one of the contributions of this study.

Since the 1990s, a common practice in the hotel industry has been progressively introduced and is related to the supply of green and resource saving amenities (soaps, shower gel, shampoos, etc.) to the guests. Along with these gifts, hotels have already a host of innovative alternatives, as the option of choosing not to have daily laundry services, which represent the first steps of the path that will lead to the implementation of CE. As regards the implementation of CE principles in the tourism hotel industry, it is necessary to highlight that the academic literature focus mainly on energy and hydric resources. Considering the implementation of the CE R- imperatives principles on the hotel industry, there is not significant academic literature to build upon. Therefore, there is a gap in the literature to fill.

## METHODOLOGY

In order to contribute to a more comprehensive and systematic understanding of the CE concept, to understand and highlight its state of the art, and its synergies with the hotel industry, an analysis of the context, considering the concept's growing influence in academic literature, was undertaken.

A bibliographical analysis of the literature related to the study theme, following a sequence of stages: 1- defining search criteria and keywords; 2- selection of database online core collection (Web of Science, ScienceDirect, Scopus, and Google Scholar and within it journals with high impact factor). The scientific databases used allowed easy access to scientific articles, reviews and books as well as other types of documents as editorials, letters and reports, so it was considered the best option due to its quality; 3- analysis of the information (content analysis).

The CE definitions gathered and considered in this study were published in peer-reviewed journals being the most popular, The Journal of Industrial Ecology and The Journal of Cleaner Production, Resource Conservation, Sustainability Science, Waste Management, Journal of Sustainable Tourism, Environmental Politics, Journal of Sustainable Conservation and Recycling, Journal of Industrial Ecology, International Social Science Journal, The International Journal of Production Economics, and reports as Ellen MacArthur Foundation (201, 2012, 2013, 2014), United Nations World Tourism Organization (UNWTO) (2017), or Organization for Economic Cooperation and Development (OECD) (2018), UNEP (2006), WCED (1987), and Waste Resource Programme, 2016. A first selection was made based on the content of abstracts and author's names, schools of thought, as well as the quality of publications.

The search threads used in a first stage was 'Circular Economy' and further ahead the focus was on 'Tourism/ Hotel Industry', applied as topics. The first filtering was conducted from the analysis of the titles and abstracts then examining the full content of the articles considered. It is important to emphasize that the analysis was centered on peer-reviewed scientific journal articles in English to guarantee the quality of the sample, 90 documents, and subsequently, 12 publications from non-profit and international organizations (such as Ellen MacArthur Foundation, UNTWO, OEDC, UNEP, WCED) were selected. Furthermore, 7 books were considered. Different categories of documents have been analysed in order to frame a CE database. Once the initial sample was analysed, some articles' references were also contemplated so that new insights on the concepts could be scrutinized on whether they could contribute with original inputs.

## CONCLUSION

The Circular Economy has evolved and has become a trending topic, with expanding relevance, concerning management policies as well as at an academic level. Stakeholders and consumers are, more than ever, vigilant with respect to environment sustainability and view CE as an approach to promote clean growth and ameliorate environmental conditions. Far beyond the prevailing economic model of production and consumption, CE sustains the effective use of natural resources to attain the transition from open-ended cycles of materials and energy to a system of closed cycles, to achieve less wasteful industrial processes. CE is also considered a preventive and regenerative approach as it minimizes the loss of valuable materials, considers waste emissions as potential resources for production inputs, and controls energy outflows by narrowing material and energy loops. It discards the concept of waste emissions, stating that the life-cycle of products ought to be planned in the design phase to avoid residues. In this perspective design and eco-design play a major key role in the CE implementation, as it represents an approach to reduce environmental impacts throughout the life-cycle of products.

Circular economy stands out as emerging and transformational economic model which intends to redesign global production and consumption models as well as to minimise the inconsistency between economic growth and environmental sustainability. It is an approach that will allow an enormous change in the role performed by resources within the economy, i.e. waste emissions would become valuable inputs in other processes, products would be repaired or upgraded instead of being discarded. In today's economy, where high and volatile resource prices are consistent, CE offers considerable business opportunities, but to do so, stakeholders have to concentrate on collecting and sharing data, exchange good and preventive practices, invest in innovation and research, and above all promote collaboration among the different actors (governments, businesses, companies, etc.). Stakeholders play a key role in accelerating the transition a Circular Economy model in a period of time compatible with the response to global challenges as climate change, water and resource scarcity, pollution, and take responsible decisions that may contribute to achieving sustainable development within a reasonable timescale.

The results of this in depth understanding of the CE concept, its evolution, its principles, and the CE R-imperatives, represents useful for research into circular economy and its connectivity with the tourism hotel industry. Therefore, this article is a contribution to identify the main trends in circular economy research and Tourism and, thereafter future research initiatives are conceivable.

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# ETHICS AND HUMAN RIGHTS BEYOND THE OFFICIAL CORPORATE HISTORY: THE CASE OF VOLKSWAGEN DURING THE BRAZILIAN CIVIL-MILITARY DICTATORSHIP PERIOD

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## ABSTRACT

*This article aims to highlight the importance of using alternative historical sources of documents that help problematize the ethics beyond the official hegemonic versions of corporate history. To this end, its authors present documents from the archives of the National Truth Commission, which reveal the involvement of companies in acts of human rights violations during the Brazilian civil-military dictatorship period (1964-1985). The article illustrates this involvement by discussing how Volkswagen do Brasil narratively create its past in Brazil. In this way, firstly, it considers that organizations make political and strategic use of their past and that this occurs through processes that rhetorically constitute official corporate history (Suddaby, Foster and Trank, 2016). Secondly, it considers that alternative memories could come to light through the constitution of new documented files that are made fully available to the general public. Thirdly, it argues that an official narrative is not necessarily synonymous with a truthful narrative, suggesting a preference for the idea of a narrative that has been legitimised by a society that is positioned in time and space (Suddaby, Foster and Trank, 2016).*

**Keywords:** Ethics and Human Rights, Corporate History, Volkswagen, Archives of National Truth Commission, Brazilian Civil-Military Dictatorship.

## INTRODUCTION

Understood as a conflicting field of meanings, instead of focusing on functions traditionally performed by memory (e.g. duration, continuity, stability, belonging, conciliation, reinforcement of social cohesion through an affective adhesion to the group), a number of researchers (Olick, 1998; Assmann, 2011; Huyssen, 2014; Rhodes, 2016) have argued for a memory analysis that favours the excluded and marginalized (with their forbidden, unutterable and embarrassing memories). Based on the idea put forward by Sorenson (2014: 283) that "organization studies are only now slowly beginning to confront the role organizations play in creating and maintaining the memory of their darker sides", this perspective may be seen clearly in the case of corporate memory and history.

On the other hand, one can observe the predominance in the instrumental use of the past (and the collective past) to implement organizational practices and policies linked to topics such as organization's information system, architecture and standardized operational procedures (Walsh and Ungson, 1991), organizational learning (Holan and Phillips, 2004), identity, reputation and legitimacy (Anteby and Molnar, 2012). For example, a coherent official history, built around a well-structured and systemized narrative and available to different interested parties in corporate museums is considered, by a number of authors, as a strategic measure (Ravasi, 2014). This is the result, in part, of

the fact that modern-day corporate museums are able to use different formats, such as installations in exhibition halls, visitor and information centers, and guided tours of plants (Nissley and Casey, 2002).

## LITERATURE REVIEW

The instrumental focus of companies is undeniable. It is exactly because of this instrumental intentionality attributed to forms of representing the past that these cannot be uncoupled from the relations of power inherent in the recovery of this past. In other words, the question is, who is actually building and rebuilding corporate history and memory, and for what purpose? At the same time, we are seeing increasing interest among management researchers in the sources and historical archives relating to companies and, as in the case of memory studies, more critical perspectives appear to be gaining ground in the debate on the subject (Rowlinson, Hassard and Decker, 2014). What happens when a particular version of official corporate history is suddenly questioned on the basis of new documented sources? What happens when these new documented sources show different versions of history, revealing organizational processes that have been silenced and are based on practices that violate human rights? The involvement of companies and large corporations in acts considered as violations of human rights is nothing new. There are many examples of how such organizations, sustained by a rationality considered instrumental, have been involved in questionable practices from the point of view of ethics and human rights (see: Baneerjee, 2008; Stokes and Gabriel, 2010). Nevertheless, the growth in the number of international and domestic public forums set up to discuss this kind of corporate involvement is quite a recent phenomenon, especially in Latin America.

On an international level, and whether the result of certain processes of de-colonialization that have sought out alternative and revised versions of history that are contrary to the policies of forgetfulness adopted by post-dictatorial governments (Huyssen, 2014), or the result of an opening up of public archives from the periods of dictatorship experienced in Latin America (Thiesen, 2014) and in Africa (Decker, 2013), a number of international entities, at different times, have sought to come up with international rules, standards and codes of conduct. These have been aimed at providing guidance and limiting the behaviour of companies and corporations in terms of human rights violations. These entities include The United Nations (UN), The International Labour Organization (ILO), the International Commission of Jurists' Expert Legal Panel on Corporate Complicity in International Crimes, and various Non-Government Organizations (NGOs) such as Amnesty International. On a more local level, a forum of particular note in this field is that of the National Truth Commissions, where the transnational debate on the violation of human rights and dictatorial regimes has taken on an even greater relevance. As stated by Huyssen (2014: 160), "(...) forgetfulness and memory were crucial in the transition from dictatorship to democracy and both influenced, not only national policies, but also legal processes and the Truth Commissions".

Brazil was the last Latin American country to set up a truth commission. Its government took almost fifty years to install this mechanism of transitional justice to review and problematise its history and its memories relating to its civil-military dictatorship period. The Brazilian military were in power from 1964 to 1985, under the leadership of the following: Humberto de Alencar Castelo Branco (1964 to 1967); Artur da Costa e Silva (1967 to 1969); Emílio Garrastazu Médici (1969 to 1974); Ernesto Beckmann Geisel (1974 to 1979); and João Baptista de Oliveira Figueiredo (1979 to 1985). Similar to other authoritarian Latin American regimes in power at the time, including in Argentina and Chile, the Brazilian military adopted repressive tactics that were centered on excluding, forgetting and annihilating differences and the groups of individuals who represented such differences. Indeed, despite the fact that divergence and differences existed within the armed forces themselves, the dynamic of the dictatorial regime was not significantly altered. It operated without "considerable variations in the use of discretionary powers, selective repression, controls on public flows of information and the maintenance of an economic development program with a modernizing and conservative slant to it" (Schwarcz and Starling, 2015: 451).

Notable for its delayed implementation, this movement, in Brazil's case, sought to clarify cases of death, torture, forced disappearances and the hiding of bodies by identifying and making public the structures, the locations, the institutions and the circumstances relating to these practices. During this process, the role of companies took on, for the first time, a greater degree of notoriety, shedding light on a subject that literature had largely ignored, namely the interwoven relationship between history, companies, the Brazilian civil-military dictatorship and the violation of human rights. In view of the above, this paper seeks to highlight the importance of recognising and using alternative historical sources of documents that help problematize official hegemonic versions of corporate history. More

specifically, in Brazil's case, the research outlined here looks at the sources produced and systemized by the National Truth Commission, which reveal the involvement of companies in acts of human rights violations during the Brazilian civil-military dictatorship period (1964-1985).

## METHODOLOGICAL APPROACH

Based on a joint analysis of the documents that make up the National Truth Commission archives, it is possible to identify a number of companies and major corporations that did indeed support and commit violations of human rights against workers and the population in general. Such abuses were committed either directly (funding the apparatuses of repression) or indirectly (working as accomplices or by encouraging other social actors). Economic benefits, strategic posts held within the public structure of government, support for the coup and maintaining it in power, producing and publicising black lists, financial backing and support for crimes of torture and the forced disappearance of workers, and political-ideological discrimination were among a broad and questionable series of practices, all readily condemned by the United Nations. On the 22 September 2015, after the work of the Commission and the investigations carried out by its Working Group "Dictatorship and Repression of Male and Female Workers and the Trade Union Movement" had been concluded, a public petition, based on these alternative documented sources, was submitted to the São Paulo Public Prosecutor's Office. This called for a civil inquiry to be set up to investigate one of these companies, namely Volkswagen do Brasil.

With regard to the case itself, as it is still relatively recent, much of the information on what took place that is available to the general public comes from three sources: (1) documents from the National Truth Commission used to support the Public Petition; (2) the Public Petition itself; and (3) articles published in the media. The main source is the Public Petition based on documents produced, obtained and organised by the National Truth Commission. The media was also an important source. For example, the day that the public petition was submitted to the Brazilian Federal Public Prosecutor's Office it was widely reported by the press, including the international press. Later, the fact that Volkswagen was the first company to negotiate a retraction agreement and legal reparation was also highlighted in the media.

## CONCLUSIONS

In this way, the article illustrates precisely this involvement by discussing – using the criminal inquiry set up to investigate the car manufacturer – how Volkswagen do Brasil (narratively) create its past in Brazil. Firstly, it considers that organizations make political and strategic use of their past and that this occurs through rhetorically narrative processes that constitute their official corporate history (Suddaby, Foster and Trank, 2014). Secondly, it considers that alternative memories could come to light through the constitution of new documented files that are made fully available to the general public. Thirdly, it argues that an official narrative is not necessarily synonymous with a truthful and ethical narrative, suggesting a preference for the idea of a narrative that has been legitimised by a society that is positioned in time and space (Suddaby, Foster and Trank, 2016). Finally, since the (re)building of memory is an instrument of power, they always produce, dynamically, different versions of the past: malleable, permitted and prohibited, but never accidental.

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# HIGHER EDUCATION BRANDING IN EMERGING MARKETS: EVIDENCE FROM TVET COLLEGES

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## ABSTRACT

*The steady increase in competition places more emphasis on the significance of branding in higher education. Technical and Vocational Education and Training (TVET) and skills development are becoming increasingly important policy issues in emerging markets. The purpose of this study is to examine the influence of branding on a student's behavioural intention towards studying at a TVET college. 336 Students completed a self-administrated questionnaire. A causal model with three hypotheses was developed and confirmed using structural equation modelling. Brand image, brand heritage and brand symbolism were found to positively impact the behavioural intention of students to study at a TVET college.*

**Keywords:** Brand Heritage, Brand Image, Brand Symbolism, Higher Education Branding, Behavioural Intention.

## INTRODUCTION

Education is a unique service due to the power of connection between the student (customer) and higher education institution (brand) (Khanna, Jacob, and Yadav (2014). It is an on-going and long-term relationship that a student signs up for and it is important that the right brand is chosen for this relationship. Furthermore, Dennis, Papagiannidis, Alamanos and Bourlakis (2016) mention that developing an effective higher education brand can reinforce this relationship building activity and create a connection between the institution and the student. This relationship requires a great deal of effort to ensure the student is awarded a qualification at the end of their educational journey. Khanna et al. (2014) further argue that the awarding of a qualification to a student accounts for the success of the institution. Institutions find themselves in a highly competitive environment that is faced with a continuous struggle to attract the smartest students, the best staff members, and the most attractive grants (Kaplan, & Haenlein, 2016). Due to this competitive nature, higher education institutions all over the world have begun to pursue a distinct brand definition of what they are to differentiate themselves (Waeraas & Solbakk, 2009). Owing to critical changes in higher education in the last three decades, the demand for quality education is also highlighted. More recently, there is a move towards marketing activities by public institutions, which are stimulated by changes in the competitive and demographic education landscapes (Dholakia & Acciardo, 2014). However, much of the research in higher education branding is mostly on universities. There is a need to understand how the branding of TVET colleges influence behaviour. Furthermore, there is scarce knowledge on the use of marketing practices for sustainable competitive advantage in public TVET colleges in South Africa (Fadahunsi & Pelsner, 2013).

TVET colleges are important in emerging market's development and form the basis of issues and policy in the region. TVET colleges are expected to respond to the needs of the economy, train young school leavers, providing them with skills, knowledge and attitudes necessary for employment in the labour market (Akojee, 2016). However, the reality of the TVET sector is riddled with inadequate throughput and output; poor labour market outcomes; poorly defined curriculum, inadequate industry and labour market relationships (Akojee, 2016). Furthermore, Oketch (2007) posit that recent concerns over TVET colleges in Africa include poor quality; very high cost; training not suited to actual socio-economic conditions; disregard of the informal sector's needs; disregard of the labour market and of the high unemployment rate among graduates. Seng (2012) state that the responsiveness and effectiveness of TVET colleges should be assessed by its influence on the social and economic development of the country. The key point is to transform it so that what is offered can reflect the prevailing reality of the labour market (Oketch, 2007).

Prior studies highlight the necessity for research in relation to the influence that comes from effective branding and the implications for higher education institutions (Dennis et al., 2016; Dholakia & Acciardo, 2014; Watkins & Gonzenbach, 2013). These institutions manage the relationship with the potential students and how students perceive the institution's brand can have an impact on the relationship with the institution and in turn, on the students' intentions to study with the institution. Improving the image and attractiveness of TVETs is a significant issue that needs to be urgently addressed (Khan, Hasan & Rabbani, 2017). Prior research has identified brand image as an essential concept on a consumers' brand choice and is of great interest to practitioners and scholars (Kwon, Ratneshwar & Kim, 2016). A few studies have been conducted on how to improve the image and attractiveness of TVET colleges in developed countries (Khan et al., 2017; Ratnata, 2013). This is lacking in emerging markets. Researchers have noted the importance of heritage in building product and corporate brands; well-known brands such as Coke Cola frequently leverage brand heritage to strengthen their brands (Merchant & Rose, 2013). Brand symbolism is studied and takes its main ideas from consumer culture theory (Nairn, Griffin & Wicks, 2008). Brand symbolism is profoundly used for consumers to negotiate identities (Nairn et al., 2008). Therefore, this study seeks to answer the following research question "to what extent does branding influence a students' intention to study at a TVET college?" In answering this question, this study makes use of the self-congruity theory. Usakli and Baloglu (2011) posit that the basis of self-congruity theory is that a consumer tends to choose brands or products that agree with one's self-concept. Thus, this study makes original contribution to the higher education branding and marketing literature by looking at a holistic casual model framework that better explains TVET branding and behavioural intention.

## **LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

Self-congruity theory is the theoretical foundation of this study. Self-congruity theory is grounded on the concept that consumers prefer brands that associate with their self-image (Boksberger, Dolnicar, Laesser & Randle, 2010). Liu, Lu, Liang and Wei (2010) state that self-congruity refers to the level of the consumer's self-concept linked to the image of a brand user. This suggests that the higher the level of congruence, the greater the probability of intention. Which means that the higher the level of brand image, the higher the probability of students' studying at a TVET college. Image is the central component in Self-congruity theory. Therefore, this study proposes a casual model (Figure 1) that suggests brand heritage, brand image and brand symbolism as direct causes of behavioural intention of students' towards studying at a TVET college.

### **Brand Heritage and Behavioural Intention**

The importance of heritage in higher education brand is noted by Bulotaite (2003), in that it is associated with key symbols such as traditions, buildings and ceremonies. This heritage can be used extensively to build an institution's brand and use the heritage to promote and create its brand name (Bulotaite, 2003). A study by Merchant, Rose, Moody and Mathews (2015) found that an institutions heritage has an influence on its reputation, prospective students' attitudes and intentions. Thus, it is proposed that:

H1: Brand heritage has a positive impact on a students' behavioural intention to study at a TVET college

### **Brand Image and Behavioural Intention**

In a competitive higher education environment, brand image within institutions is as important as any other service organisations (Brown and Mazzarol 2009). It is no surprise that prospective students undertake a brand image decision-making process to choose their preferred institution, where an individual's perceptions of reality can influence their behavioural intentions (Cheng, Mitomo, Otsuka & Jeon, 2016). Therefore, the following hypothesis is suggested:

H2: Brand image has a positive impact on a students' behavioural intention to study at a TVET college

## Brand Symbolism and Behavioural Intention

In the higher education context, symbolism is revealed to be necessary to show the strategic change of an institution in influencing decision making (Gioia, Thomas, Clark, & Chittipeddi, 1994). Bernritter, Verlegh and Smit (2016) state that the negative consequences of self-brand connections are stronger for brands that are perceived to be of higher symbolic meaning. The higher the symbolic meaning of TVET colleges, the greater the brand is perceived to be distinct compared to other higher education institutions and the higher the likelihood that students will have the behavioural intention to study at a TVET college. Thus, the following hypothesis is anticipated:

H3: Brand symbolism has a positive impact on a students' behavioural intention to study at a TVET college

## METHODOLOGY

The measurement scale items used to measure the three hypotheses in this study were adapted from previous studies. The items used to measure brand image were adapted from Lien, Wen, Huang and Wu (2015). Items for brand heritage were adapted from Wiedmann, Hennigs, Schmidt and Wuestefeld (2011). Items for brand symbolism were adapted from Bhat and Reddy (1998) and items for behavioural intention to study were adapted from Lin (2006). All the measurement scale items were measured on a five-point Likert-type scale with anchors ranging from 1 (strongly disagree) to 5 (strongly agree). The population for this study were grade 12 high school students in South Africa. A systematic random probability sampling method was used to select the 3 high schools and participants. A self-administrated questionnaire was used to collect the data. The data collection generated 336 usable questionnaires.

## Results

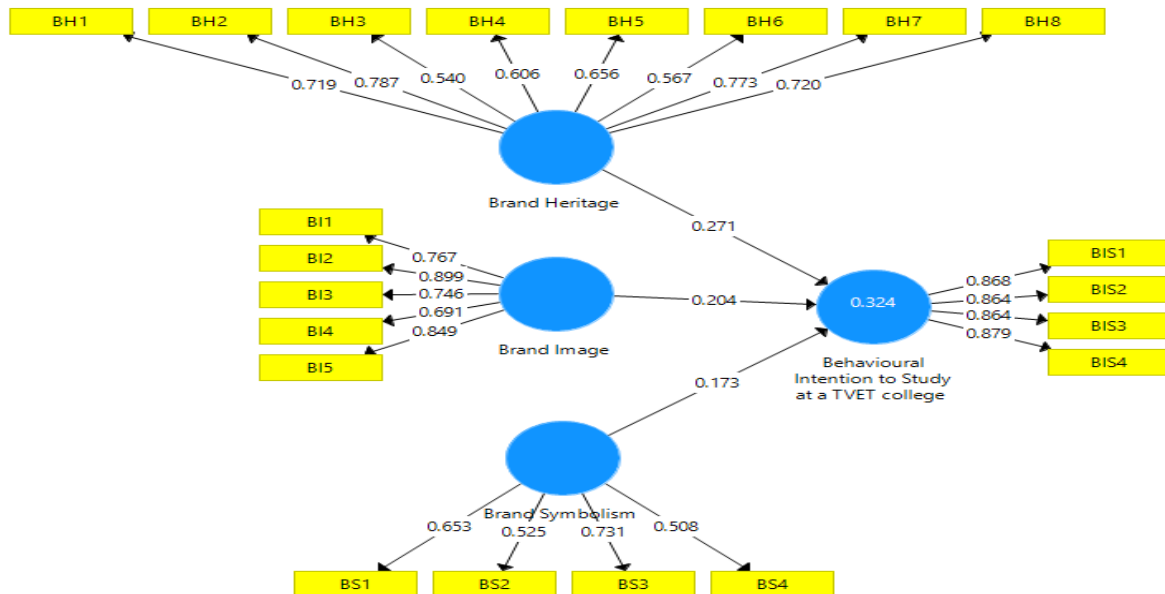
The analysis is based on Partial Least Squares (PLS) grounded Structural Equation Modelling (SEM). The SmartPLS 3 software was used to analyse the data. The Confirmatory Factor Analysis (CFA) of the casual model was measured for its construct reliability and validity, namely through Cronbach's alpha (CA), composite reliability (CR), and average variance extracted (AVE). The results as seen in Table 1 show that the values for CA and CR meet the recommended threshold of 0.7 (Hair, Sarstedt, Pieper & Ringle, 2012), with values ranging from 0.7 to 0.9. The results of the AVE as shown in Table 1 validate that the AVE test scores are greater than 0.4 and are considered acceptable (Wong & Teoh, 2015). Discriminant validity of the casual model was measured using the Fornell-Larcker criterion and factor loadings. The Fornell-Larcker criterion suggests that a latent variable shares more variance with its assigned indicators than with another latent variable (Hair, Ringle & Sarstedt, 2011). The results presented in Table 1 show that the latent variables are greater than the inter-construct correlations. Figure 1 show that all the factors have loadings between 0.502 and 0.899, which are above the recommended 0.5 threshold for discriminant validity (Hair et al., 2011).

**Table 1: Construct reliability and validity.**

		CA	CR	AVE	1	2	3	4
1	Behavioural Intention to Study at a TVET college	0,925	0,925	0,754	<b>0,869</b>			
2	Brand Heritage	0,873	0,869	0,458	0,532	<b>0,677</b>		
3	Brand Image	0,893	0,894	0,630	0,502	0,765	<b>0,794</b>	
4	Brand Symbolism	0,702	0,700	0,474	0,445	0,606	0,525	<b>0,611</b>



**Figure 1: Factor loadings and structural model.**



For PLS-SEM path modelling using SmartPLS 3, Standardised Root Mean Square Residual (SRMR) and Normed Fit Index (NFI) are recommended as appropriate model fit measures (Ringle, Wende & Becker, 2015). For this study SRMR and NFI was 0.07 and 0.79 respectively, which according to Gambashidze, Hammer, Brösterhaus, Manser (2017) are desired. Thus, the study was a good model fit.

The results in figure 1 above has shown that H1 ( $\beta=0.271$ ,  $t=2.380$ ), H2 ( $\beta=0.204$ ,  $t=2.124$ ) and H3 ( $\beta=0.173$ ,  $t=2.036$ ) are proven to be significant and positively impact on a students' behavioural intention to study at a TVET college. Therefore, accepting and providing support for the posited hypotheses. In addition, the results show that brand heritage has a stronger impact on behavioural intention, while brand symbolism has a weaker impact. Furthermore, the results further confirm that the independent variables together explain 32.4% of the variance in behavioural intention to study at a TVET college among the participating students.

## DISCUSSION AND CONCLUSION

The study's results are consistent with prior studies that have examined existing relationships between brand heritage, brand image and brand symbolism on behavioural intention (Merchant et al., 2015; Gioia et al., 1994). This means that creating a distinct higher education brand is essential in this highly competitive education landscape. Hence, this study found that branding has an impact on the behavioural intention of students to study at a TVET college. For instance, when faced with multiple choices, student will choose the most unique and innovative brands. This has shown that it's important for policy makers and managers to build effective strategies that improve the brand image, brand heritage and brand symbolism of TVET colleges in emerging markets.

The implication from the abovementioned variables has a distinct impact to marketers, colleges and policy makers. Successful TVET colleges are those that build their brand image around quality teachers, innovative learning, and relevant qualifications as a core career development. TVET colleges should sustain all their brand building efforts to recruit quality teachers, industry relevant qualifications and offer exceptional student experience to enhance their perceived brand image. A TVET college's image is very important in attracting prospective student. For managers, building a TVET college's image is the single most important factor that will influence the decision-making process.

Building a positive brand image has several benefits for TVET colleges, namely attracting top students, big global companies, partnerships and funding.

Brand heritage play a crucial role in driving the narrative around what TVETs are and what value they bring to the economy and society. Brand heritage is one area that should not be neglected as many parents still want their children to go to university. Thus, changing the mindset of parents will be the biggest challenge after convincing the student to study at a TVET college. This is due to historical reasons associated with TVET colleges and students who are academically weak. This is the kind of heritage that is negatively perceived by many stakeholders.

The results suggest that branding strategies should focus on building and maintaining a TVET college's image, heritage and symbolism as well as increasing the students' behavioural intention to study at a TVET college. Furthermore, the management of TVET colleges and policy makers should identify potential touchpoints for these branding strategies when attracting potential students.

The findings of this study do provide theoretical, managerial and conceptual contributions to existing higher education branding and marketing literature and presents an interesting scope for future research around TVETs in emerging markets and developed economies. This is the first study to consider TVET colleges as the holistic framework between brand image, brand heritage and brand symbolism within higher education branding literature. As well as look at branding constructs as fundamentals factors that predict behaviour among students' intention to study at a TVET college. This will assist scholars and policy makers to allocate their efforts in more valuable ways for addressing the most-needed challenges in building a sustainable TVET brand.

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# **SOCIAL MEDIA IN THE WORKPLACE: A STUDY OF ZIMBABWE'S REVENUE AUTHORITY, BULAWAYO, ZIMBABWE**

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## **ABSTRACT**

*The paper sought to unveil the interactive relationship between social media and the workplace. The focus was the Zimbabwe Revenue Authority, an entity responsible for assessing, collecting and accounting for revenue on behalf of the State. Data collection was through in-depth interviews, semi structured questionnaires and focus group discussions. The Media Synchronicity theory posits that social media promotes convergence, enhances knowledge building and transfer. Corporate entities adopt social media to mass reach customers. Social media has its shortcomings. There should be appropriate, effective policies that regulate the use of social media platforms in the workplace.*

**Keywords:** Social Media, Inland Revenue, Media Synchronicity Theory, Facebook, WhatsApp.

## **INTRODUCTION**

Social media has evolved to a variety of uses reaching one's private life and the work life. It is now more pronounced. Social media is accessed and shared through social networking platforms such as Facebook, Instagram, WhatsApp, Twitter and Snapchat and Face Time. The first three afore mentioned platforms are all owned by Facebook Inc. Facebook, the world's largest social media website, has 1, 7 billion monthly users representing one-seventh of the world's entire population (Statista, 2016). WhatsApp is the other big social media app focussing more on the messaging service. It has over 1 billion users globally (ibid). Empirical research on social media in the workplace is rare, and such studies are usually conducted in limited and specific settings (Cao *et al.*, 2012). Sociologists argue that there exists a positive correlation between social networking and employees' performance (Leftheriotis and Giannakos, 2014). Social media reduces productivity of employees as they spend long periods of time online and chatting (Turban *et al.*, 2011).

Zimbabwe has seen a steady rise in internet access in the recent years. The Post and Telecommunications Regulatory Authority of Zimbabwe (2018) notes that internet subscriptions in Zimbabwe stand at 5,879,552. This equates to roughly a third of the country's population). The WhatsApp platform is the most popular social media application. Mobile phones are the most popular devices used to access social media platforms. In workspaces computers, other gadgets add to mobile phones as devices in accessing the social media platforms. Consumers are now more adept and demanding thus raising the need for social media providers to be more adaptive. As a response mobile phones have now become technologically more advanced.

The Zimbabwe Revenue Authority (hereby called the Inland Revenue) is a tax agent collecting revenue for the State. It is a custom and excise agent and derives its mandate from Zimbabwe's Revenue Authority Act (Chapter 23:11). The mandate is to collect revenue, facilitate trade and travel, and advise government on policy. The revenue collection comes in the form of customs duty; value added tax, excise duty, income tax, pay as you earn tax, presumptive taxes, mining royalties, capital gains tax and surtax. The Inland Revenue's mission is to promote development through efficient revenue generation and trade facilitation. This is achieved by developing competent and motivated personnel, using environmentally sustainable processes thus engaging with global community in a socially responsible way. Its operations also include curbing smuggling and any forms of international trade crime as

well as to enforce import, export and exchange controls. Most of these controls are meant to protect the consumer against dangerous and harmful drugs, hazardous substances, expired drugs, and harmful substances. The Inland Revenue comprises the following divisions namely, Domestic Taxes, Customs and Excise, Legal Services, Revenue Assurance, Human Resource and Human Capital Development, Finance, Administration and Infrastructure Development, Loss Control, Internal Audit, Information Communication Technology, Board Affairs and Strategy, Research and Modernisation. This paper sought to unearth the causal interactive relationship between social media and the workplace.

## LITERATURE REVIEW

The use of social media can be traced back in 1997 when America Online's (AOL) then executive Ted Leonsis argued that organisations needed to provide their consumers with social media for effective communication and to create a customer participatory social environment (Bercovici, 2010). Over the years social media grew steadily. Social media platforms are considered as social tools because they were modified in a way that individuals or organisations transfer or communicate with one another in a simple way. For instance, the prominence social networks like Facebook launched 2004, has become evident with 650 million users on the network internationally. The first popular form of social media was the SNS, SixDegrees.com that was created on individual online profiles was launched in 1997 (Boyd and Ellison, 2007). Subsequently a number of social media technologies have been created which include blogging platforms *inter alia*. From the year 2000 social media began to grow exponentially as a viable means of networking, connecting families, friends and organisations at large. However it was not until 2006 when Twitter and Facebook were introduced that companies started to take notice that they could in fact use social media platforms to interact and engage with their customers (Ogaro, 2014). Historically, social media has grown as an influential and powerful communication tool. It has also caused a significant democratisation of corporate communications.

The notion of social media is open to a myriad of definitions and these definitions are not consistent. For Kaplan and Haenlein (2012) social media entails a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 which allowed the creation and exchange of user-generated content. Social media is not only about communication; it includes interaction between users (Bhanot, 2012). Social media is anything using the internet to create a dialogue between or among people (Lundgren *et al*, 2012). The concept of social networking is not new as human interaction inherently promotes the formation of networks through social contact (Tapscott and Williams, 2007). Internet based social media can be understood as a situation where people communicate, utilising online platforms while they are connected to the internet (Cox and Rethman, 2011; Herlle and Astray-Caneda, 2011). Social media is an alternative means of mass communications that employs new information and communication technologies such as mobile phones, iPads, tablets and the internet to produce, store and distribute multi-media messaging, text messaging and mobile pictures (Mhiripiri and Mutsvairo, 2013). This defines social media as any services that allow any organisations or individuals to connect with other people of similar interests and background. Social media has undergone rapid growth over the past few years, with profound consequences for both the employers and employees (Ogaro, 2014). Social media is characterised by accessibility, interactivity, and technology. It includes blogs, wikis (interlinked collaborative web sites), photo-sharing sites, and Internet forums and extends to social networking utilities.

The popularity of social media has soared largely due to rapid changes in technology. Computers are now portable and mobile (Dwyer *et al*, 2007). The ubiquitous use of social media has also brought new challenges to the present day workspaces. Corporate entities now devote a significant proportion of their marketing budgets on social media-ad spending. Social media offers a unique opportunity for brands to engage with customers in real time, unlike other advertising mediums. Companies are increasingly using social media as a new way to reach customers more effectively (Adzovie *et al*, 2017). Apart from marketing applications, social media has evolved to hybrid uses for example Twitter is sometimes used as journalistic platform for interactive news feeds. Facebook and WhatsApp's group feature are at times used to enhance communication in the corporate world. This arguably trims the cost of internal communication.

## THE THEORETICAL FRAMEWORK: THE MEDIA SYNCHRONICITY THEORY

Several theories have been posited to explain media interaction and effects. These are namely, the media synchronicity theory (MST), the equity theory and the social capital theory. Social capital theory argues that it is the relationships matter (Warnakula and Manickam, 2010). Unlike MST the social capital theory posit that trust, cooperation and reciprocity in relationships can have a positive impact on the wealth of the society. This is realised through the reduction of transaction costs, facilitating collective actions and thus lowering opportunistic behaviour (Andriani, 2013). The Equity theory leans more on workers attitudes and behaviours. It is argued that these shape work performance. An employee's perception of equity is determined through comparing his inputs/outcomes ratio to that of others within the organisation. The paper used the MST. With MST synchronicity occurs among employees at the work place when employees work together at the same time with a shared focus (Dennis *et al.*, 2008). Media synchronicity refers to as the degree or the extent to which the capabilities of a communication medium enable individuals to achieve synchronicity (Xiongfei *et al.*, 2012). The main tenets of this theory are that tasks are a set of essential micro-level communication procedures, which are composed of two ultimate processes; conveyance and convergence. In this regard conveyance processes focuses on the exchange of vast quantities of new information. On the other hand, convergence processes involves reaching a common understanding of pre-processed information (Dennis *et al.*, 2008). MST argues that for conveyance processes, use of medium with lower synchronicity should lead to better communication performance while for convergence processes, use of medium with higher synchronicity should lead to better communication performance (Dennis *et al.*, 2008 cited in Xiongfei *et al.*, 2012).

Xiongfei *et al.*, (2012) posit that MST has five objective capabilities of medium that influence the level of synchronicity:

These are transmission velocity: the speed to which a medium can transmit a message, parallelism: the degree to which a medium permits data from multiple senders to be transmitted concurrently symbol sets: the number of ways in which the information can be transported rehearsability: the level to which a medium enables the sender to prepare or regulate the message before sending reprocess ability: the extent to which a message can be re-examined or processed again by the receiver. (p. 45).

In contrast, MST argues that one medium is not inherently better than another (ibid). Rather, tasks comprise of a series of communication processes, so that different media capabilities are required. Nonetheless, when a variety of media with different capabilities are engaged to complete a task, communication performance will be improved, thus leading to better task performance. Social media is utilised informally and formally as means of conveying official and non-official information within and external to the organisation.

## METHODOLOGY

The target population was the Inland Revenue's personnel. A total of 100 questionnaires were distributed. The response rate was 75%. Semi-structured interviews were also held with personnel from various departments (human resources, information technology, audit section, administration and the clientele services). There were twenty in total and sought views on the nature of interaction between social media and workspaces. Four focus group discussions were held with participants drawn from the Inland Revenue's eleven divisions.

## RESULTS

### The questionnaire

The WhatsApp platform was the most common social media used. Facebook and Twitter ranked second and third. You Tube ranked 4<sup>th</sup>. The availability of free WIFI was the major driver in using social media during the working hours. The majority used their mobile phones to communicate with friends, colleagues and relatives. Some used their

private mobile phones to transact and communicate with clients and colleagues. The Inland Revenue has absolute ban on the use of office computers in accessing social media during the working hours. It holds it an offence for one to use a private mobile phone whilst serving a client. The Inland Revenue's ICT security policy serves as a guide in the ICT usage by the personnel. Ten percent of the messages sent on social media platforms were domestic issues related, 30% work related, another 30% joke related and the remainder (30%) were on current affairs. The times spent on social media platforms during working hours averaged as follows; 10% spent less than 2minutes, 20% spent 2-5mins, 10% between 5-10mins, another 10% between 10-20mins and the remaining 50% were always logged on.

The messages usually sent on the social media platforms were bundled as follows; domestic issues, work, jokes and current affairs. Sometimes the message they received on these platforms were either good or bad. This tended to affect their work performance. This at times negates their work performance. Some argued that the use of CCTVs to monitor them would not effectively deter employees from accessing social media during working hours and sending work related messages on their private social media platforms.

One respondent averred that:

Even if they put CCTVs in our work stations one could just go to the bathroom. A ban on mobile phones and other social media gadgets actually lowers our morale and could lead to dissatisfaction and lower performance. The company should focus not on stopping us using social media at work but at helping us to ensure that we could use it to the company's advantage. Some of us cannot live without our smart phones and social media.

It was noted that the Inland Revenue has a sizeably a number of demographically varied informal WhatsApp groups and Facebook groups. The groups provided a platform to share jokes, news and other content such as religious and inspirational quotes. The most trusted messages were those sent by co-workers especially if it had to do with pertinent issues relating to the organisation. The messages were also bound to be trusted more if the originator was a senior member within the organisation.

## **The Interviews**

The respondents posited that social media has the potential to play a greater role in corporate life and corporate communication. Some saw social media as critical in influencing the way they viewed and related in their workplaces. Others felt that social media platforms such as Facebook, Twitter and WhatsApp Work have enhanced their work performance. Social media has enabled them to communicate and get feeds from their colleagues on work challenges and tasks. For example, through social platforms personnel are made aware of any tax amnesties as these have a direct bearing on set targets. Some users held that social media works as a viable channel for information dissemination. Others felt that social networking increased their knowledge, abilities, motivates and created oneness within the organisation. Arguably employees who spend more time on social media by nature are more connected to others than those who do not. Therein lies the potential in exposing employees to new ideas and thinking. One can posit that employees who are skilled at interacting with others through social media are prone to be good problem solvers. The passing of unauthorised information through social media platforms was rife and posed a significant risk to the organisation. In most instances productivity was lost when employees spend considerable work time on social media platforms. It was noted that group social networks are prone to peddling rumours and false information. At times corporate news leaked to social media platforms before the official announcements.

## **The Focus Group Discussions**

A total of four focus group discussions (FDGs) were held. The mix of participants was drawn from the organisation's eleven divisions. It was noted that the official social media platforms were used exclusively in the interaction between the organisation and its stakeholders including the public. These platforms communicated formal messages and work related messages. The formal platform was easy to control by the organisation. During the discussions all agreed the formal platforms mostly marketed the company.



Formal social media platforms were beneficiary as they had a potential of knowledge enhancing and built *esprit de corp*. The justification of using social media to communicate work related information was that it was more convenient. As one respondent in the FDGs argued:

If one follows the administrative chain of getting information one will be behind time and that means trouble with the management. Why should I put a request in writing and email when the response could take time when I could simply check if someone is on line on WhatsApp or Facebook and have the necessary details while the proper procedure of requesting information could be done later to ensure proper administration (FDG1, 2018).

In defence of the informal platforms two respondents argued that:

There are several WhatsApp groups which we formed as workers here. Laws guarantee us that right; no-one can stop us from having discussions in these groups (FDGs 2, 2018).

Actually even management are members of some of these groups. We had a Facebook group as well but lately it is not as active as it used to be. The organisations' official WhatsApp, Facebook or twitter accounts market and notify the public of our work thus making our work simpler (FDGs 2, 2018).

One could even find necessary information from someone who is not at work, thus access to information becomes relatively easier. Workers admitted to continued use of private social media platforms to communicate information. This study revealed that workers were adverse to more controls being made in the organisation.

## **OBSERVATIONS AND DISCUSSIONS**

It was observed that professional social media sites such as LinkedIn, allow employees to join specific work groups in order to engage in conversations with other professionals in similar industries. This broadens their knowledge and helps generate unique ideas and be innovative. It can provide business solutions. Some posited that it was important that the rules and regulations on the use of social media not be selective but applied justly to all. The social media conversations therefore enable the management to be in the know on what the personnel are discussing and devise responsive strategies to counter any negative feeds. One senior executive felt that social platforms help them to dispel rumours before they become an organisational threat. Social media platforms bring in risks of computer viruses and malware.

## **CONCLUSION**

Social media in the workplace has positive and negative effects. Social media should be understood as a tool that needs to be appropriately utilised, balancing the individual right and the need to maximise employees obligations to the organisation. Social media has the capability of harnessing creative, facilitative group networks hubs. Social media is critical in an organisation whether used in formal and informal settings.

## **IMPLICATIONS FOR POLICY**

Social media is a rapidly growing mass communication phenomenon. Smart organisations are those that harness this phenomenon to tap on its limitless possibilities. There should be appropriate and effective policies that regulate the use of social media platform in the workplace. These policies should foster creative harmony in the workplace.

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# HOW TO PLAY THE LOTTERY STOCKS

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## ABSTRACT

*This study examines the performance of lottery-type stocks sifted by net current asset value (NCAV) strategy and investigates the source of positive excess returns generated in this strategy. From previous studies, the lottery-type stocks are perceived to be sold at low cost with a small probability of huge excess returns in the future, but it is identified as the source of underperformance. We conjecture the lottery-type stocks portfolio would outperform after applying the NCAV criteria. In the NCAV portfolio, there are significantly positive alphas which can be explained by market risk, small firm, liquidity and momentum effects. However, the excess returns even double in the overlapping portfolio of lottery stocks with NCAV strategy. Interestingly, the small-firm factor, in comparison with insignificant value factor, is extremely significant in it.*

**Keywords:** lottery stocks, liquidity, quality, small firm effect, deep value strategy.

## INTRODUCTION

Lottery-type stocks are perceived to have a small probability of huge excess returns in the future with low current selling costs. However, as the state lottery buyers, the probability to win lottery stocks are considerably small. Furthermore, Kumar (2009) demonstrates that lottery-type stocks are the cause of underperformance in the portfolios and the level of underperformance increases with an incremental lottery-type stocks weighting scheme.

Lottery stocks are generally identified with low price, high idiosyncratic volatility and high idiosyncratic skewness and previous research targets the lottery-type stocks as value stocks, small-cap stocks, no-dividend-paying stocks. What is more, lottery stocks tend to have considerably lower liquidity and lower analyst coverage and therefore, they are preferred by individuals while institutions exhibit a relative revision.

Relatively, net-nets portfolios, which is generated by net current asset value (NCAV) strategy, perform similar features as lottery-type stocks portfolios, such as small market capitalization, high-value ratios, low analyst coverage and low liquidity. While the net-nets portfolios show a consistent outperformance through the time. The NCAV strategy, or so-called deep value investing strategy, is originated from Ben Graham in 1920s and still play a pivotal role in investment strategy. It is constructed by only focusing on the value of total current assets net of total liabilities and net of preferred stock. Briefly speaking, the deep value investors just buy assets whose prices are below the net current asset value of the company.

We are inspired by the consistent outperformance of net-nets stocks, the likelihood of lottery-type stocks to gain high profits with low costs and their similar characteristics. Thus, we attempt to apply a consistent profitable investing strategy-Net Current Assets Value strategy upon lottery-type stocks, aiming to find out the approach to win the stock market stocks. And the lottery-type stocks are deduced to outperform with NCAV strategy.

**Table 1: Characteristics comparison of lottery-type stocks and NCAV stocks.**

	<b>Lottery-Type Stocks</b>	<b>NCAV stocks</b>
<b>Stock type</b>	Value stocks	Deep Value stocks
<b>Value-related ratio</b>	High book-to-market ratios	High book-to-market (B/M)
<b>Market Capitalisation</b>	Small-cap stocks	Micro-cap stocks
<b>Dividend-paying</b>	Non-dividend-paying stocks	Not sure (confounding)
<b>Attention</b>	Attention-grabbing (Individual preferred)	Neglected
<b>Analyst Coverage</b>	Low analyst coverage	Low analyst coverage
<b>Liquidity</b>	Lower liquidity	Lower liquidity

We identify the lottery-type and net-nets stocks in the American stock markets with an expanded period from 1970 to 2017, then explore the overlapping stocks in lottery-type stock portfolios and NCAV portfolios. We are dedicated to gain a deeper understanding of the mechanisms that generate different performance, so compare the performance of lottery-type stocks, net-nets stocks and the overlapping and non-overlapping parts of these two portfolios.

Up to now, it is found that i) net-nets stocks outperform in both equally and value-weighted portfolios; ii) the lottery-type stocks are discovered to underperform in the value-weighted portfolio within the 48-year period which is consistent to Kumar (2009); iii) Alpha of net-nets portfolios drops if removing lottery stocks no matter when equally and value weighted, though removing net-net stocks from the lottery portfolio makes little difference; iv) The alphas of net-nets stocks are almost doubled after applying a secondary lottery stock filter. Interestingly, the small-firm factor, in comparison with insignificant value factor, is extremely significant in the net-nets portfolio; v) For the portfolios generated by the deep value investment strategy, the value factor is not significant, whilst the small firm effect plays a key role in explaining positive alphas. Even with the inclusion of liquidity factor, the small firm effect persists which is inconsistent with the statement of Alquist et al. (2018) that the small firm factor is just a proxy for illiquidity.

## METHODOLOGY

The research period is from 1st January 1970 to 31st December 2017 and we gather general information in American stock market such as monthly stock return, price and the number of shares outstanding from the Centre for Research on Security Prices (CRSP) and annual accounting data are from Compustat.

Considering previous research only claims the underperformance of lottery stocks from 1991 to 1996, we test the aggregate performance of lottery stocks in a long-run. And the performance of net-nets stocks is also tested in the expanded period between 1970 and 2017. All standard common CRSP stocks traded on the NYSE, AMEX and NASDAQ with the share code of 10 or 11 are included. Because we focus on the American stock market, only the common stocks are kept and the ADRs, foreign companies traded in the U.S. market, are excluded. Considering the characteristics of net-nets stocks, financial institutions, resources and energy sectors are excluded from CRSP stocks, and the selection of lottery-type stocks is consistent with this filter.

The monthly stock return is adjusted for delisting to avoid survivorship bias according to Shumway (1997), and the potential effects of liquidation, merger and acquisition are also examined in the following research. Stock

returns with dividends are adjusted for stock repurchases, stock splits and rights issues.

To analyse the portfolio performance and identify net-nets stocks, we compute the market capitalisation at time  $t$  by multiplying the number of shares outstanding and share price. There are cases when the same firm has two or more securities at the same date. Thus, we aggregated all market capitalisation for a given company, date. This aggregated market capitalisation will be assigned to the firm with the largest Market capitalisation.

To detect lottery-type stocks, three criteria, low price, high idiosyncratic volatility and high idiosyncratic skewness, are applied independently. The idiosyncratic volatility and skewness at the end of month  $t$  are measured using previous six months of daily return data (month  $t-6$  to  $t-1$ ). Specifically, the Fama - French Three-factor and momentum factor (*FF3M*) model is employed with monthly time series data from Kenneth R. French's data library. Following Ang, Hodrik, Xing and Zhang (2006), the idiosyncratic volatility is the standard deviation of the residuals from the four-factor regression with previous 180 days daily return data. The estimates of idiosyncratic volatility start in May 1969 and the idiosyncratic volatility in month  $t-1$  is matched to month  $t$  returns from June 1969 to December 2017. Additionally, the stock-specific skewness is calculated with daily stock returns by fitting a two-factor model where the two factors are the excess market returns and the squared excess market returns (Harvey and Siddique, 2000). The cheap stocks are identified as the lowest price in  $k$ th percentile with  $k=50$  at the end of month  $t-1$ . Though Kumar states that results are similar when  $k$  equals to 50 or 33, I find a significant difference in my test. As for the high idiosyncratic and high volatility sorts, we keep the  $k$  equal to 50 percentiles. Therefore, the lottery-type stocks are supposed to occupy around 12.5 percent by number ( $=50\%*50\%*50\%$ ) in the market.

The stocks which meet the NCAV criteria takes two rounds of netting from current assets, hence the term "net-nets". The sort for the NCAV stocks are intuitive and straightforward- identify stocks which NCAV exceeds their market capitalisation (MktCap). To calculate the NCAV, balance sheet statistics including total current assets, total current and long-term liabilities and preferred stocks are collected from COMPUSTAT. What should be noticed in the selection is that the scale of the number of shares outstanding in the CRSP is thousand, while the statistics computed from the COMPUSTAT is in million unit. The scale is unified to the unit of million to avoid biases. Here we directly sum up all liabilities and preferred stocks and subtracted them from firms' total current assets. There are different approaches to compute the NCAV. The monthly stock returns, stock prices, number of shares outstanding and SIC are obtained from the CRSP, and the return is adjusted by delisting. The annual accounting data, including total asset value, the value of preferred stock and the value of the total liability, are gathered from the COMPUSTAT to compute the NCAV.

$$NCAV = Total\ Current\ Assets - Total\ Liabilities - Preferred\ Stock \quad [eq1]$$

We form the net-nets portfolios at end June year  $t$  and match with NCAV in June of last year  $t-1$  to avoid look-ahead bias. There is a twelve-month lag between the market capitalisation and NCAV which is to ensure related information is accessible for investors even in the case of delay in publication. Both equally-weighted and value-weighted are formed to analyse the performance and for the net-nets stocks, the equally-weighted portfolio is expected to outperform the value-weighted because value weighting represents the antithesis of a value focussed strategy, in particular, it would mean buying more as the margin of safety declined.

## RESULTS DISCUSSION

We compare the frequency of stocks in each portfolio. It can be found that the number of lottery stocks which occupies around 13 percent of the aggregate market is much more than the stocks sifting by NCAV strategy. Specifically, the total number of lottery-type stocks in the full sample through the observing period is 13761 and the total number of net-nets stocks is 3035, respectively. The overlapping part, which is the net-nets stocks sifted by lottery characteristics have 1552 stocks and there are 2302 net-nets stocks without lottery characteristics and 13645 lottery stocks failing to pass the NCAV selection.

According to descriptive statistics (Table 2), net-nets stocks are generally value stocks in small or micro

companies with small market-to-book ratio, especially for the NCAV stocks with lottery characteristics which have smallest mean and median ratios. Lottery stocks are relatively glamour stocks in small firms, though the average sizes of companies in lottery portfolios are larger than net-nets stocks, with high growth prospects and negative net current assets value. And we find stocks with lottery characteristics tend to have negative earnings during observing period. While the lowest average and median price fall in to the overlapping portfolio of net-nets stocks and lottery stocks, the differences in price between it and other portfolios are not as significant as we assume. Additionally, net-nets stocks with lottery characteristics are less volatile than others and have more positive right-tail skew than other net-nets stocks.

Then we run the Carhart four-factor Model with results reported below (Table 3). By comparing different alphas for these five portfolios, we find that: firstly, the net-nets stocks show an aggregate outperformance in both equally and value weighted portfolios in observing years ; Secondly, the lottery-type stocks are discovered to underperform in the value-weighted portfolio within the 48-year period which is consistent with the conclusion of Kumar (2009); Thirdly, alphas of net-nets portfolios drops if removing lottery stocks no matter when equally and value weighted, though removing net-net stocks from the lottery portfolio makes little difference; What is the most important is the alphas of net-nets stocks are almost doubled after applying a secondary lottery stock filter, with the monthly 2.3% for EW portfolio and 0.4% for value-weighted portfolio. And it is confirmed that the equally-weighted portfolio outperforms the value-weighted for portfolios with NCAV stocks.

Interestingly, the small-firm factor, in comparison with insignificant value factor, is extremely significant in the net-nets portfolio. The heavy and consistent loads on the size factor in portfolios with net-nets stocks indicates that though the NCAV strategy is originated as the deep value investing method, the profitable key is a small capitalisation strategy.

It is very inspiring to find that net-nets stocks with lottery stocks obtain significantly high excess returns which even surpass the aggregate net-nets portfolio. We next analyse whether the outperformance is consistent in two to five and longer holding periods, which is also to examine the potential effect of the business cycle.

Additionally, to explain the abnormal high returns of net-nets stocks with lottery characteristics, we argue three catalysts might be the trigger for the value realisation: firstly, takeovers can reward investors because sophisticated acquirers with private information understand the true value of NCAV companies and they spot the chance of merging assets with cheap price, therefore, existing shareholders are paid with premiums through merger and acquisitions. Secondly, the market may overestimate the probability of distress due to representativeness and narrow framing bias and causes the selling price of net-nets stocks below its liquidation value. Management under the pressure will try to improve operating performance of undervalued companies and brings a promising prospect to the shareholders. Thirdly, even though net-nets company enter liquidation stage, the residual asset value is enough to pay off all creditors and equity holders can be distributed with leftovers. We will analyse the possible influence of catalysts on the NCAV effects with lottery characteristics, and the potential negative effect brought by cash burn, losses on receivables, obsolete inventories booked at greater than true value and costly liquidation will also be considered.

Several other risk factors and firm features, such as turnover, analyst coverage may also explain the difference in performance. And the cheap stock price may also be one of explanation for the outperformance by the net-nets strategy, so the price stratification will be applied on portfolios. Though the lottery-type stocks relate to state lotteries by their salient features that lottery investors and lottery players expect to bet a low cost for a huge return in the future, the stock price might be just relatively lower than average, but still higher than its true value or have a limited margin of safety. Additionally, the NCAV stocks require time to realize returns but lottery investors may transact frequently in the cost of high transaction fees and low returns.

**Table 2: Descriptive Statistics.**

Portfolios	Market Capitalization		NCAV		MktCap/ NCAV		Book Value		Market /Book Ratio		Earnings		Price	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Net-nets stocks	61.09	10.64	181.68	17.53	0.64	0.69	9.33	5.95	9.74	1.86	57.95	0.41	5.00	2.00
Net-nets without lottery characteristics	79.96	12.33	253.15	21.66	0.61	0.66	10.94	6.85	11.26	1.79	89.50	0.80	6.11	2.00
Net-nets with lottery characteristics	21.79	8.04	32.70	12.66	0.70	0.72	5.99	4.67	6.58	2.00	-7.74	0.01	4.17	4.35
Lottery stocks	165.15	28.96	-80.96	1.70	8.09E+12	1.40	3.62	2.43	87.05	2.67	-13.52	-0.22	5.55	4.00
Lottery stocks without net-nets	174.49	31.66	-88.58	1.20	8.64E+12	1.66	3.46	2.29	92.32	14.36	-13.89	-0.23	5.72	4.13

**Table 3: The performance of portfolios.**

		_type_	Alpha	mktrf	smb	hml	umd	Adj R2
<b>Net-nets</b>	EW	Coefficient	0.013	0.777	1.095	0.107	-0.347	0.687
		T-Stat	7.540	19.566	19.802	1.777	-8.911	
	VW	Coefficient	0.003	0.865	0.737	0.114	-0.151	0.723
		T-Stat	1.999	27.206	16.647	2.360	-4.835	
<b>Overlap</b>	EW	Coefficient	0.023	0.822	1.480	-0.011	-0.392	0.516
		T-Stat	7.703	11.908	15.245	-0.103	-5.753	
	VW	Coefficient	0.004	0.920	1.483	0.062	-0.335	0.615
		T-Stat	1.689	15.814	18.115	0.700	-5.839	
<b>Net-nets without Lottery</b>	EW	Coefficient	0.008	0.758	0.872	0.163	-0.320	0.678
		T-Stat	5.024	21.025	17.366	2.975	-9.060	
	VW	Coefficient	0.003	0.850	0.611	0.122	-0.108	0.678
		T-Stat	1.746	25.858	13.336	2.434	-3.360	
<b>Lottery Stocks</b>	EW	Coefficient	0.001	1.041	1.440	0.054	-0.370	0.780
		T-Stat	0.747	25.401	25.017	0.865	-9.125	
	VW	Coefficient	-0.020	1.262	1.275	-0.034	-0.453	0.845
		T-Stat	-12.967	35.052	25.253	-0.613	-12.765	
<b>Lottery without Net-nets</b>	EW	Coefficient	0.000	1.052	1.435	0.057	-0.365	0.781
		T-Stat	0.157	25.668	24.922	0.909	-9.007	
	VW	Coefficient	-0.021	1.266	1.271	-0.035	-0.455	0.845
		T-Stat	-13.159	35.025	25.068	-0.638	-12.755	



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# THE MODERATING ROLE OF IIAs IN FDI: IMPLICATIONS FOR SUSTAINABLE DEVELOPMENT

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## ABSTRACT

*Despite a long belief in positive impact of Foreign Direct Investment (FDI) on host countries and in a positive role of international investment agreements (IIAs) in attracting FDI, empirical studies in neither of the areas have confirmed results. As Sustainable Development has become an important agenda for many developing and less developed countries, where FDI is considered as an important resource for their development. A clearer picture of the relationship between FDI, IIAs and sustainable development will have significant implications in both academic and policy terms. Thus, this study explores conceptual frameworks to re-shape these relationships.*

**Keywords:** Impact of FDI; institutions; International investment agreements (IIAs); sustainable development.

## INTRODUCTION

Foreign direct investment (FDI) has long been considered as beneficial to the development of states. At the same time, international investment agreements (IIAs) have also been increasingly encouraged in international, regional and bilateral trade and investment agreements as a vehicle of 'investment protection' for foreign investors (mainly Multi-National Enterprises, MNEs) as they are expected to help signatories attract FDI to their countries. This is particularly so for developing and less developed countries where lack of transparent, efficient or effective institutional environment often deters FDI inflows to these countries.

Despite the apparent desirability of the negotiated investment treaties to contribute and promote sustainable development, the text of most old-type treaties (Bilateral Investment Treaties, BITs) does not expressly refer to it. Instead BITs in their Preambles refer to "prosperity" to be increased among all the signatories of the treaty (i.e. Australia/Hong Kong BIT, 1993; Nigeria/Germany BIT, 2000; or Nigeria/China BIT, 2001). This means that arbitrators that decide arbitration cases based on these treaties, under which a foreign investor is seeking damages against the host state, are under no obligation to take sustainable development into account when making their decision. In order to avoid any doubts as to the intended role of IIAs in promoting sustainable development, modern IIAs now expressly refer to the concept in their Preambles "REAFFIRMING their [contracting states] commitment to promote sustainable development and the development of international trade in such a way as to contribute to sustainable development in its economic, social and environmental dimensions" (CETA, 2016, Preamble, para. 9).

However, although there is significantly developed body of knowledge on both 1) the role of institutional development in impact of FDI; and 2) the role of IIA/other relevant legal instruments on FDI attraction, empirical results of these studies are still mixed and thus, the relationship between FDI, institutions and legal instrument are still ambiguous. Thus, this study aims to develop conceptual frameworks which bridge these two bodies of knowledge. The structure of the study is as follows: the next section presents the context of this study and the third section develops conceptual frameworks. The final section discusses policy implication and methodological suggestions for future studies.

## CONTEXT

### FDI Impact on Host State and Institutional Influence

Despite a common belief in benefits from FDI, the degree of ‘benefits from FDI’ on host countries can vary depending on host country condition. Whilst main motivations of FDI are usually derived from ‘economic reason’, some FDI might be attracted to a certain host country for political reasons or by lax regulatory structure in the host (Dunning and Lundan, 2008). A host country might attract inward FDI with lax regulatory structure to certain degree, but if so, there is also danger of long-term issues related to these types of FDI such as creating ‘race-to-bottom’ tax competition or ‘pollution haven’, which might surpass benefit from FDI. In many developing ‘natural resource rich countries’, the actual spill-over effect and/or benefits of inward FDI has been questioned (*e.g.* Cordes *et al.*, 2016) with often raising concerns related to ‘enclave economy’, environmental issues, governance (*e.g.* corruption; political stability) and/or inequality (*e.g.* Basu and Guariglia, 2007; Hitam and Borhan, 2012).

Thus, recent studies on ‘impact of FDI’ have been moving towards to ‘sustainability’ issue particularly together with the launch of UN Sustainable Development Goals (SDGs) (*e.g.* UNCTAD, 2014; Biermann *et al.*, 2016). However, there is still dearth of research on what factors make FDI more sustainable in host countries. Bridging point between FDI and sustainability might be institutions and governance. Studies and policy papers suggest importance of ‘governance’ or ‘institutional development’ at national level for ‘sustainable development’ (*e.g.* Acemoglu *et al.*, 2004). Institutions, “the humanly devised constraints” (North, 1990, p.3), are created and characterised depending on the “given lumpy indivisibilities” of each country. They in turn “shape the direction of long-run economic change” in a country (*ibid.*, p.16). Thus, some FDI studies also discuss institutional influence on whether and to what extent a host country has positive impact from FDI (*e.g.* Bénassy-Quéré *et al.*, 2007; Rottig, 2016; Biermann *et al.*, 2017). In many developing/less-developed countries “[i]nstitutions are...(often)...created to serve the interests of those with the bargaining power to devise new rules” (North, 1990, p.16) rather than in a way to “facilitate the functioning of markets” (Khanna and Palepu, 2010, p.6). Although many developing and transition economies have carried out, institutional reform, “institutional development is a complex and lengthy process...(and therefore),...[d]ismantling government intervention and reducing barriers to international trade and investment...do not immediately produce well-functioning markets” (*ibid.*, p.13). In these countries, where “inefficient forms of exchange” are common in markets, (North, 1990 p.11), institutional voids are “a prime source of the higher transaction costs and operating challenges” (Khanna and Palepu, 2010, p.6). Thus, this study proposes that IIAs or other similar legal instruments might play a certain role, particularly, in the context of filling the institutional voids in these countries.

### The Role of Investment Treaties in Promoting and Protecting FDI: the Current Legal View

#### Legislative History of FDI Protection

At the turn of the 19<sup>th</sup> century and under the charge of the United States, states have entered into “Friendship, Navigation and Commerce Treaties” (FCN Treaties), which have served as the model for the true investment promotion and protection instruments: Bilateral Investment Treaties (BITs). BITs are signed between two states, who aim to attract FDI from each other’s territories. More commonly, BITs were setup to protect the foreign investors from developed (home) states, investing into the developing (host) state. In order to offer protection, BITs have a number of substantive standards of protection, most commonly expropriation; fair and equitable treatment (FET); national treatment (NT); most-favoured-nation treatment (MFN) and full protection and security (FPS). The substantive standards are also accompanied by a unique instrument in international law: investment treaty arbitration (ITA)

BITs continue to be important legal instruments today. Despite their omnipresence, BITs have been criticised for their broad, “catch-all” and vague character and many states have aimed to redraft their investment protection policies, by entering into a new type of investment protection agreements. Most notably, states have pursued regional trade and investment policies in a coordinated manner, resulting in trade agreements, which also contain investment protection chapters, or attached agreements. In total, there are more than 3300 International Investment Agreements (IIAs) in force today, and out of these, most are still BITs (UNCTAD, 2018).

More recent examples of IIAs include the (1) EU-Canada Comprehensive Economic and Trade Agreement (CETA); (2) EU-Singapore Free Trade Agreement, with an Investment Protection Agreement; (3) EU-Japan Economic Partnership Agreement; (4) EU-Vietnam Trade Agreement, with an Investment Protection Agreement; (5) EU-Mexico Trade Agreement; and some, in which negotiations are still on their way: (6) EU-New Zealand Trade Agreement; (7) EU-Australia Trade Agreement; and (8) EU-MERCOSUR Trade Agreement. Unlike BITs, these new treaties (mega-regionals) are more comprehensive and states negotiate access to market, trade tariffs and other areas, together with investment protection and promotion. Likewise, IPAs attached to these mega-regionals are a clear attempt to remedy some of the poor treaty drafting as reflected in the BITs, in the hope to secure more sustainable development, preservation of the states' regulatory space and improvements to investment dispute settlement mechanism (UNCTAD, 2018).

Investment treaty arbitration (ITA) as the mechanism for settling investment disputes has traditionally been identified as the main advantage of IIAs for mainly two sets of reasons (Franck, 2007). On the one hand, ITA offers control to individual investors over their investment dispute and involved interests, severing their dependence from their home states. ITA gives independent legal standing to private parties (non-state) to enforce state's legal obligations under international law. This is a unique feature of ITA, which does not have a comparator in international law. ITA severs investor's dependency on its home state for the solution of its dispute with another sovereign (host) state. That is a distinct comparative advantage that foreign investors have over any domestic competitors, who can only enforce their legal rights within the parameters of the domestic legal (court) system. At the same time, ITA is seen to depoliticise complicated and strenuous disputes (Dugan *et al*, 2008).

### **Intellectual Property: an Unknown Constant**

Intellectual property has been attributed with positive contributions to the development of host states (UNCTAD, 2007). Its protection has been safeguarded internationally since the 1880-s with multilateral treaties, and has been included in the trade agenda since the 1990-s. What was less known until recently, intellectual property is also protected via international investment agreements, because it is included in the definition of a qualifying "investment" under most investment treaties. It has been argued that the characterisation of intellectual property rights (IPRs) as foreign direct investment helps to achieve economically positive effects for the development of a country (Maskus, 2000; Corredor, 2014).

The origins of IP protection in investment treaties can already be traced to the FCN Treaties, which are the historical predecessors of BITs. BITs very clearly include IPRs into the definition of investments, particularly by listing IP in the "asset based" definition. This additional protection of IP has been however dormant and has only recently been brought to light by the *Philip Morris* arbitration cases. Despite an obvious backlash, it appears that states do not wish to exclude IP assets from investment protection. The mega-regional agreements, such as CETA, continue to list IPRs in the definition of a protected investment and further increase the protection of IPRs via separate chapters on IP.

### **Current ITA Legitimacy Crisis**

#### **Lack of empirical evidence to justify system**

The vast literature and policy response focus their criticism on (1) the process of ITA; and (2) broad substantive protection in IIAs. More specifically, it has been argued that the ITA system is skewed in favour of the foreign investors. According to UNCTAD, there have been 904 ITA cases in total (Investment Policy Hub, 2018). Out of these, 580 cases have been concluded and 314 are still pending. The concluded cases show the following picture: 35.9% have been decided in favour of the state, and only 28.1% have been decided in favour of the investor. Moreover, 22.9% of cases have been settled; 10.9% have been discontinued; and 2.2% have not been decided in favour of either of the parties (liability under IIAs was found; but no damages were awarded). Although the numbers of the currently resolved ITA cases do not appear to confirm this impression of the system as biased in favour of the multinational enterprises (foreign investors), there are substantial transaction and litigation costs attached to complex ITA cases. Moreover, there is some evidence to support the argument that the existence of the ITA system can lead to regulatory chill (Van Harten and Scott, 2016), particularly with regulation, which aims to protect the public interest in the areas of health or the protection of the environment. If ITA and broad substantive protection do not contribute to the

development of the host state through increased inward FDI, what is their benefit to the broader public interest and the state?

### **New cases stress-testing the system as a whole**

There are several cases that have shed light on the inadequacies of the investment treaty system for FDI protection. The first string of cases is illustrated by arbitration in *Philip Morris v Australia* and *Philip Morris v Uruguay*. Here the tobacco companies opposed the new regulation in the area of public health. Another example of IP arbitration, which has been seen as a surprise development in expert communities is the arbitration in *Eli Lilly v Canada*. Here, the pharmaceutical company challenged the Supreme Court's interpretation of patent laws, arguing that its legal interpretation is in violation of the TRIPS Agreement and in violation of the NAFTA provisions protecting patents as qualifying investments. A different example is the arbitration in *Vattenfall v Germany*. After the 2011 Fukushima nuclear disaster in Japan, Germany made a regulatory decision to close down all nuclear power stations without any compensation. This prompted the foreign investors to file an arbitration claim under the Energy Charter Treaty in the hopes of acquiring some form of compensation for the closed facilities. When first filed, the actions by the foreign investors were broadly criticised and served by the critics of the ITA system as the prime example of the inadequacy of the system as a whole. The parties have reached a settlement in 2011 (Award, 2011), whereas the German Constitution Court found in favour of the investors.

## **CONCEPTUAL FRAMEWORK**

### **Linking IIAs and FDI: IIAs as substitute for poor institutions?**

IIAs included in global treaties have been believed to enhance trade and investment of MNEs and expected to work as substitute for poor institutional environment of many developing host countries. In this context, a substantial number of empirical studies have indeed found IIAs working as a positive determinant of FDI into developing countries and this seems to be particularly so when these countries have BITs with developed sourcing countries (e.g. Büthe and Milner, 2004; Neumayer and Spess, 2005; Salacuse and Sullivan, 2005; Yackee, 2011). In a similar context, some studies found only ratified BITs have significant positive effect as FDI determinants (e.g. Siegmann 2008; Büthe and Milner 2014), which implies that host countries' strong 'signal' to commitment to these 'substitute institutional arrangement' might be a pre-requisite condition to utilise legal instruments in attracting FDI.

However, overall, the results of these empirical studies vary with some studies finding no significant impact of IIA on FDI (e.g. Gallagher and Birch, 2006; Siegmann, 2008) and with others finding their results are not statistically significant (e.g. Hallward-Driemeir, 2003; Tortian, 2012). The results of studies which found IIA as a positive determinant of FDI are also complex depending on the contents of IIA (e.g. Neumayer and Spess, 2005; Salacuse and Sullivan, 2005; Siegmann, 2008), the nature of impact of IIA on FDI (e.g. Büthe and Milner, 2004; Yackee, 2011) or firm level decision (e.g. Egger and Merlo, 2012) (see pp.14-21 in UNCTAD, 2014). The implication from these studies is that IIAs certainly play a positive role in attracting FDI, but whether the role is as decisive as a determinant has not been agreed. Moreover, there is lack of attention on whether IIAs play any role in impact of FDI on the host country at the post-FDI stage (*ibid*). As IIAs exert additional costs to host countries, policy implication of IIAs in relation to FDI might need to be considered at an encompassing level incorporating issues regarding attracting, maintaining and utilising benefit from FDI (Büthe and Milner 2004; Neumayer and Spess 2005; Gallagher and Birch, 2006). Whilst there is dearth of study which explores whether and/or how legal instrument might help or hinder the process of a host country fully exploiting benefits from FDI, this issue is significant for 'sustainable development' of many countries. Legal instruments/treaties aiming at protecting MNEs' investment bring differing dynamism between MNEs and host country governments/societies.

### **'Moderating effect of IIA' in attracting and retaining FDI**

The rationale behind this study's proposition is based on findings from previous studies that impact of IIA is minor or secondary rather than 'independent' determinant with limitations in influencing economic matters (UNCTAD, 2014).

In addition, several studies found that IIAs seem to work as complementary with good institutions of host countries rather than substitute of poor institutions as expected (*e.g.* Hallward-Driemeier, 2003; Neumayer and Spess, 2005; Tobin and Rose-Ackerman, 2011). Tortian (2012) similarly finds that financial development of a host country dilutes the BIT impact on FDI flows. These studies imply that the role of IIAs might be moderating ‘institutions’, which is one of key FDI determinants, rather than ‘determining’ FDI directly. Moreover, some studies suggest that the impact of IIA on FDI seems to be dynamic rather than static. For example, Egger and Merlo (2007), by including temporal dummies, found that the positive impact of IIA on attracting FDI seems to decrease as time goes by. In a similar context, Tobin and Rose-Ackerman (2006) argue that the marginal effect of extra BIT decreases. If the role of IIA in relation to FDI changes over time, the scope of cost vs. benefit consideration regarding IIA and FDI also needs to be extended to post-FDI stages, where host countries deal with actual impact of FDI, as well as pre-FDI stages.

Here, in its discussion on impact of FDI, this study focuses on ‘sustainable FDI’ coming from ‘long-term’ investment. Although ‘long-term’ FDI might not necessarily bring ‘sustainable’ FDI, longer-term FDI certainly brings more stability and certainty to a host country in its utilising benefit from FDI. In fact, studies found that long-term commitment of an MNE’s business in a host country is positively linked to re- or expansionary investment (*e.g.* MacKinnon and Phelps, 2001; Nguyen, 2016). Criscuolo and Salter (2006) also suggest ‘repeat investment’ as one of indicators in measuring an MNE’s embeddedness in the host country which can bring more sustainable FDI. In a similar context, Ernst and Young (2011, p.11) reported that “more than 50% of employment generated in the UK from FDI is from companies which have already established a base in the UK and are either expanding or co-locating further investment at an existing site”. Thus, for a host country, it is important to understand what influences on retaining investments as well as attracting them.

In this context, this study also proposes that IIAs might play the moderating role in retaining FDI (*e.g.* re- or expansionary investment) as well as attracting it. For example, Egger and Merlo (2012), using firm-level data, found that BITs have a positive impact on the sample firms’ FDI activity in their hosts by increasing the number of their plants, FDI stocks and fixed assets per firm (UNCTAD, 2014). Similarly, IIAs might play a role in “domestic institutional reform efforts” of a host country (*ibid.*, p.10), which in turn will boost MNEs’ confidence in the host country whilst potentially increasing their re-/expansionary investment or potentially deterring any “institutional arbitrage” of MNEs (Rottig, 2016, p.12), *i.e.* exploiting weak institutional structure of a host country, at their post-investment stage. Thus, the conceptual framework of this study on the relationship between IIA and FDI can be depicted as in Figure 1.

## DISCUSSION AND CONCLUSION

### Methodological suggestions for future study

On methodological suggestions for future studies, the most likely one might be statistical ones with ‘moderator’ variable included in an equation (*e.g.*  $y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 (x_2 \wedge x_3)$ ), where  $y$  represents either inward FDI or re-/expansionary investment as the dependent variable and  $x_2$  denotes institutional factors whilst  $x_3$  denotes legal instruments such as IIAs). Here, depending on the context of the study, selection of variables and proxies might be diversified. Particularly, considering the emphasis of this study’s framework on institutional factors and investment-related legal agreements, hypotheses might be developed in more detailed levels such as comparing differences of effect of bilateral IIAs (BITs) as opposed to regional IIAs.

However, this study’s framework does not exclude possibility of being developed into a qualitative study. If quantitative studies support moderating effect of IIAs, depending on data availability, a qualitative case study on implementation and/or negotiation of IIAs between MNEs and host country governments might bring great insight regarding details of ‘how’ IIAs moderate institutional factors and impact of FDI in host countries.

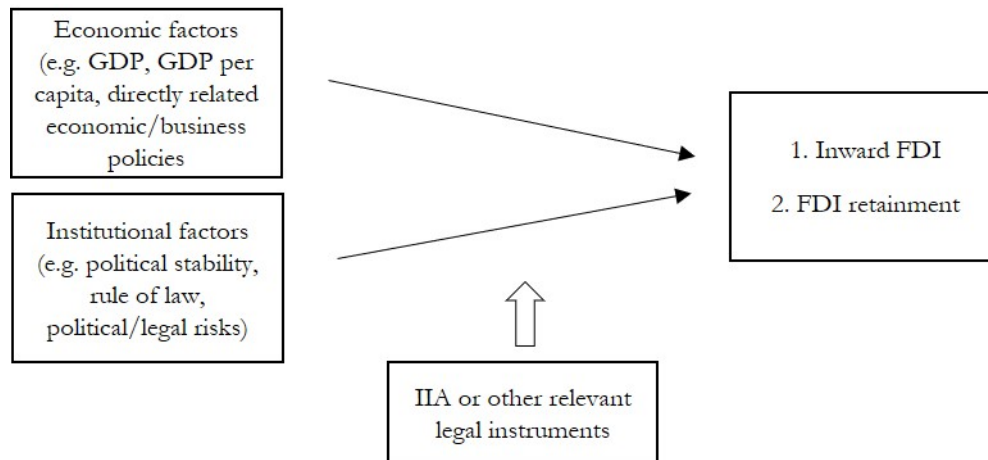
## Policy implication and concluding remarks

This study provides conceptual frameworks by re-assigning the role of IIAs in relation to FDI as ‘moderating institutional influence on FDI’ in both attracting and retaining FDI. Thus, these frameworks might bring policy implications in two areas. Firstly, this study can re-enforce the importance of institutions. The argument that “institutions matter is hardly novel or controversial” but “what is interesting is *how* institutions matter” (Peng *et al.*, 2008 p.921). This study’s frameworks, where IIAs play a moderating role in the relationship between institutions in host countries and FDI into the countries, can provide more specific assumptions regarding whether and/or how IIAs can be utilised for improving host country institutional development. Secondly, by extending the scope of research on IIAs and FDI to post-investment stage, this study’s conceptual frameworks suggest ‘long-term’ effect of IIA through its potential moderating role in institutional development of a host country. Thus, they can provide policy implication of ‘impact of FDI’. This is particularly relevant to ‘sustainable development’ of developing countries. In some cases IIAs might work against the host country when MNEs exploit institutional void in a host country. As the moderation can be done in either enhancing or deterring way, this framework also covers potential negative effect of IIAs on FDI, which can provide relevant policy implications to host countries’ negotiating and signing future IIAs.

To achieve sustainable development goals, states not only need resources but also need to retain and develop the resources for longer term. Whilst FDI can provide valuable resources for many developing countries, the impact of FDI does not always seem to be positive. Similarly, the role of bilateral and regional IIAs in attracting and securing FDI is also ambiguous. This paper explores the role of IIAs in relation to FDI in broader context. It is argued here, that the IIAs have an important role in retaining, as well as attracting FDI by moderating influence of institutional factors in host countries and are resultantly essential in the pursuit of sustainable development goals. Thus, this study contributes to both the body of knowledge in several related academic areas including FDI and international law study by providing frameworks to be developed into future empirical studies whilst providing significant policy implications regarding sustainable development for developing and less developed countries.

## FIGURES

**Figure 1: Moderating effect of IIA on institutional factors in 1) attracting and 2) retaining FDI.**





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# URBANISATION AND RENEWABLE ENERGY: OPPORTUNITIES FOR SMALL SCALE FOOD MANUFACTURES IN BANGLADESH

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## ABSTRACT

*The purpose of this paper is to determine how renewable energy and competitive advantage are related in the food processing industry, especially in Bangladesh. Although innovation has an impact on business competitiveness, but they are not considered together in the literature. Hereof, renewable energy encloses both approaches. Secondary data collected from around 60 valuable sources including journals, articles, official reports, newspapers, and various original data sources. All secondary data have been analysed through statistical analysis software. Impact of renewable energy over business shown the most positive factor, followed by urbanization and exports of the food industry. Energy cost over business growth also shown strong positive factor but due to lack of data, that relation hasn't shown significant enough. Though the lack of previous research data and lack of data information over the search engine, the research results in some areas are partially significant. More practical fieldwork in this area will help better understanding why food processing industry adopts renewable energy to lead competitive advantage. For managers, it can be a relevant tool to identify which area need to develop strategically, where need to continue best practice so that they invest appropriately to achieve competitive advantage. This study brings an innovative approach with strong theoretical support in a conceptual model, collecting and investigating all the relevant area in the literature.*

**Keywords:** Urbanisation, Competitive advantage, Renewable energy, Sustainability, Food processing industry.

## INTRODUCTION

Competitive advantage has become the most influencing buzz word in the business world (Cattani et al., 2017). The growth in competitive pressures and the rise of emerging markets has amplified the importance of strategic thinking within organisations with a view to ensuring their competitiveness (Cattani et al., 2017). In fact, a growing number small to medium enterprises (SME) are now engaging in strategic thinking to enhance their performance in a competitive and globalized business environment (Srivastava et al., 2017). For instance, in the manufacturing industry, like other developing countries, India is creating the scope of interference by the development of definite dynamic capabilities for competitiveness (Teece et al., 1997). The increase in global competition and the changing consumer tastes poses a challenge particularly to the food industry in Bangladesh. As such, the food industry has to respond to these competitive pressures. One way of doing this is through innovative techniques in products and processes (Srivastava et al., 2017). And yet, in Bangladesh, the food industry organisations are still entrenched in their traditional business practices. This is cause for concern particularly given the market penetration of global food brands, and global food manufacturers.

One argument for transition is that of renewable energy. Here, the focus is on the transition towards more sustainable energy (Strachan et al., 2015). Previous research has suggested that if SMEs embrace this energy transition, they stand a better chance of reducing their costs, and thus being able to compete in terms of prices. In fact, there are suggestions that there are a short run and long run effective relations between CO<sub>2</sub> emission, financial growth, energy consumption and opening trade (Jebli et al., 2015). It is further suggested that renewable energy not only support annual national energy consumption but also with renewable energy resources, any business and industry can boost its competitive advantage (Fortune, 2016). According to Fortune (2016), the world's biggest retail company Walmart's

aim is to generate green energy up to 50% by 2025. Currently, 25% of the total energy is coming from renewable sources. Of particular interest is that Walmart has opened food distribution centers which are completely sustainable, with the intention to achieve a 60% energy efficiency target. In comparison to the traditional refrigerated center, the new initiative is expected to save around \$4.8 million in energy cost over the five years (Walmart, 2010). And yet, in Bangladesh, food retailers and manufacturers are still entrenched in traditional energy sources and business practices.

In Bangladesh, the food processing industry plays an important and vital role in terms of global food demand. Further, activities of this industry help to create jobs and contribute to the gross domestic product (GDP). According to BBS (2016), the FP industry alone increased by 9.25%, and this was particularly the contribution made by large and medium companies. In Bangladesh, the food processing industry alone attained an increased growth rate of 9.25%. In fact, the food processing sector contributes 22% to the country's manufacturing production with only 8% of total manufacturing employees (Hussain and Leishman, 2013; Ministerial industry report, 2013).

It is of concern that the cost of energy is on the rise, and this has an implication on the pricing of exports. This rise in energy costs has forced some food processing companies to close their business (Amin, et al., 2016), as they now fail to compete at both the local level and the international level. According to DEFRA, UK (2010), in low GDP countries, production development can be limited due to costs of fossil fuels, especially if the country needs to import and that has a huge impact on the GDP. In this regard, the increase in the costs of production is ultimately passed to the consumer in the form of higher prices.

In light of the above, the energy cost and food costs are the main concern at this stage. The future price of fossil fuel and oil will be much higher and that is cause for the food processing industry in Bangladesh (Amin, et al., 2016). Therefore, there is need to adopt alternative approaches to ensure continuity in the supply of electricity, and or energy in the food processing industries. One way of doing this is by adopting smart energy. And yet, there has been little attention on this subject in previous research regarding the food processing industry in Bangladesh.

## **RESEARCH QUESTIONS**

Q1. What is the relationship between competitive advantage and Renewable Energy in relation to the food processing industry in Bangladesh?

Q2. How does the food processing industry contribute to the economy in Bangladesh?

## **LITERATURE REVIEW**

### **Concept and Importance of Renewable Energy (RE):**

An energy that can be retrieved from natural sources and can replenish and use infinitely (Arena, 2016). Another definition described as, the energy that naturally regenerated over the short time and develops directly or indirectly from natural resources as known as renewable energy (Treia, 2016). In addition, a source that captures the energy from an on-going natural process like, sun, wind, hydropower, etc. defined as renewable energy (Science daily, 2016).

Over the years, the number of energy proportion coming from non-renewable resources which are reducing day by day because of rising energy demand and that's high demand introduce the importance of renewable energy for the future world (BBC,2014). Renewable energy globally accepted to decarbonization the electricity industry and reduce carbon emissions which have become challengeable for all (Malcolm, 2013). In UK, government has finally admitted making a renewable energy roadmap to invest and to ensure that investment will shield the country from fossil fuel price and reaching the national electricity consume target by 15 percent by the end of 2020 and reduce the GHGs emissions by 80 percent by the end of 2050 (CCA, 2008; DECC, 2010a).

However, in recent research shows that after implementing the roadmap, renewable energy added 54.5% of the national electricity in 2017 where solar and wind power was a star among the other resources (The Telegraph, 2017). Apart from decarbonization and reduce emission, renewable energy is the ultimate option for future energy

cost. According to The Guardian (2016), another research found that Australia's renewable energy sector added 21.7% of electricity in the national market and also decrease the emissions to 0.8% compared to the last year 2015 which shows country returned to the level of May 2014. The potential renewable energy production could play an important role both for complete diversification from fuel source product which reduces the import dependency for the country's and rapidly increases the fossil fuel price (Mbizibain, et al., 2015).

## **Concept and Importance of Competitive Advantage (CA):**

Achieving a competitive advantage is defining as an objective of strategy (Porter, 1996; Day, 1984, 1994). According to Levin (2010), every organization wants to keep ahead of competitive advantages to deliver its products and services with remarkable outcomes and profit that can be continued for its customer and users. In similar, Reed and DeFellippi (1990), states that numerous sources can introduce the competitive advantage and that form of strategy employs the sources through organizations control to achieve a competitive advantage. Different factors and forces such as environmental, organizational and personal could possibly resolve the firm's competitive advantage (Ma, 2004). In addition to Ma, Barney (1996) also mention related factors and forces which firm can be utilized could be both internal, inside the firm capacity or completely externally and control from outside of the firm. Contrarily, Porter (1996), also states that poor strategies destroy the organization's competitive advantage.

According to Ma (1999), competitive advantage can be categorized into three types of a business process like ownership-based business, resource-based and business efficiency based. Where ownership based competitive advantage mainly refers to the strong market position (Porter, 1980), resource-based to indicate the access-based action and efficiency refer to reputation (Barney, 1991; Hall, 1992). In contrast, competitive advantage can also achieve by the form of a superior class to factor based market and product-based market (Barney, 1991; Lieberman and Montgomery, 1988). However, Porter (1980), suggests, to achieve the product based competitive advantage, three comprehensive strategies of cost, differentiation and focus can be used. On the other hand, an organization could gain the competitive advantage through its exceptional knowledge, know-how and capabilities in manipulating and guiding its business operation (Nonaka, 1991; Prahalad and Hamel, 1990; Teece et al., 1997). In addition, Porter (1990) states, competitive advantage is not only about gaining superior performance but also compete in the global market and hold a strong defensive position.

The importance of competitive advantage can be described as, its help the organization to exploit extraordinary competencies and abilities which is completely different to them (Leskovar-Spacapan and Bastic, 2007). The researcher also states that competitive advantage is not a static rather dynamic process which requires regular attention. Today's business management model needs to be sharp, interrelated and flexible in order to manage all the rising and upcoming challenges and being able to keep sustain and superior performance for its respective organizations (Paim, et al., 2008). Most of the organization's prime aim is to expand the available resources to achieve its strategic objectives as well as its consumer demand (Nadarajah and Kadir, 2014). In similar, researcher Richardson (2007) says, all the business process has linked that combine between employees, business system and process of its organizations.

As explained earlier, three comprehensive products based competitive advantage strategies, which is low cost, differentiation and focus are the main important component can be adopted by any company, for its industry or product or services. According to Hill and Jones (1995), competitive advantage is important to identify the company's input and output factors, which is the key priority for any company. Competitive advantage refers as a strategic activity that creates higher value on its competitors. Dess et. al (2006), says, any company can dominate its rivals by finding the gaps between distinguish value and the cost of the product with the assist of competitive strategy. However, the possibility of competitive advantage duplication is higher if it's not sustained over the period (Barney, 2015).

## **Food Processing Industry (FPI) in Bangladesh:**

Though categorized as a low-income country, Bangladesh is considered as one of the fastest growing and migrating to becoming a middle-income country by 2021 (Hussain and Leishman, 2013). According to BBS (2016), the country's GDP of FY16 indicate an increased rate of GDP of 11.98%, which means the current GDP is 7.05 compared

to 6.55 FY15. This growth increase is mainly due to improved contributions by the food processing industry and other related industries (BBS, 2016).

The food processing industry is a huge employer in Bangladesh. According to Hussain and Leishman (2013), Bangladesh's food processing industry was worth \$2.2 billion that increased on average 7.7% per annum between the years 2004 and 2011 respectively. In Bangladesh, the food processing industry alone attained an increased growth rate of 9.25%. This increment is obtained from large and medium scale companies (BBS, 2016). And yet, Bangladesh has around 2,804 small and medium-sized food processing companies. This means the output of the food processing companies if properly accounted for could be much higher than that which is currently recorded. In fact, the food processing sector contributes 22% to the country's manufacturing production with only 8% of total manufacturing employees (Hussain and Leishman, 2013; Ministerial industry report, 2013).

Bangladesh itself has a huge consumer market that is attributed to the increasing population, and consequently, increased demand for food. The population growth is of particular importance to understand because it is a factor that drives the demand for food consumption.

**Table 1: Population of Bangladesh.**

Year	Population	Yearly % Change	Yearly Change	Density (P/Km <sup>2</sup> )	Urban Pop %	Urban Population	Country's Share of World Pop	World Population	Bangladesh Global Rank
2017	164,669,751	1.05 %	1,718,191	1,265	35.7 %	58,746,319	2.18 %	7,550,262,101	8
2016	162,951,560	1.09 %	1,750,674	1,252	34.9 %	56,856,665	2.18 %	7,466,964,280	8
2015	161,200,886	1.16 %	1,810,357	1,238	34.1 %	54,983,919	2.18 %	7,383,008,820	8
2010	152,149,102	1.19 %	1,743,600	1,169	30.3 %	46,035,276	2.19 %	6,958,169,159	8
2005	143,431,101	1.74 %	2,369,972	1,102	26.8 %	38,373,642	2.19 %	6,542,159,383	8
2000	131,581,243	2.08 %	2,574,874	1,011	23.7 %	31,229,852	2.14 %	6,145,006,989	8
1995	118,706,871	2.25 %	2,503,646	912	21.9 %	26,003,685	2.06 %	5,751,474,416	9
1990	106,188,642	2.64 %	2,597,755	816	20.0 %	21,274,633	1.99 %	5,330,943,460	9
1985	93,199,865	2.73 %	2,345,801	716	17.7 %	16,496,299	1.91 %	4,873,781,796	8
1980	81,470,860	2.70 %	2,032,987	626	15.0 %	12,251,656	1.83 %	4,458,411,534	8
1975	71,305,923	1.85 %	1,251,631	548	10.0 %	7,107,810	1.75 %	4,079,087,198	9
1970	65,047,770	3.10 %	1,842,746	500	7.7 %	5,034,728	1.76 %	3,700,577,650	9

Source: Worldometers, 2017, Bangladesh Population.

According to Hossain and Leishman (2013), the FP industry in Bangladesh is facing various issues including low scope utilization, technological destruction, and poor strategy. The challenges in power supply and tremendous cost of energy creates some barriers for the small to medium food processing companies to operate and compete effectively. It should be understood that the process of transforming raw food into various products needs a huge amount of energy; especially the processed heat and that heating system need some devices that generate energy (International Renewable Energy Agent, 2014).

## Relationship between Competitive Advantage and Renewable Energy in Food Processing Industry:

The food and beverage processing industry are expected to generate revenue of approximately \$3.03 trillion by 2020 with an annual growth rate of 4.5 percent (Food Processing, 2017). This indicates that the food market will be highly competitive. Retailers will seek to establish an advantage by offering better products at competitive prices, increased consumer loyalty and increased market share (Hungenberg, 2012; Food Processing, 2017). In fact, consumers have a tendency to buy luxury goods like clothes, cars and so forth at higher prices. At times they associate this high price with the quality of the product. In the food industry, the consumer tends to prefer cheaper food products (Brem, et al.,

2016). In seeking to pay lower prices, consumers seek variety, as well as better tasting and healthier foods (Jackson, 2010). Therefore, the retailers that provide a better-quality product at an affordable price tend to be competitive. As such, it is of paramount importance for the food processing companies to search for ways to achieve a competitive advantage and deliver value products at a lower cost (Anthony, 2012).

The world demand for food specially processes food will be increased due to high population growth over the next decades approximately 9.6 billion by 2050 (United Nations Department of Economic and Social Affairs Population Division, 2013). The report also said that a large portion of the population will put the impact on food consumption which will increase energy consumption. Another report of Food and Agriculture Organizations of the United Nations (FAO, 2011) says, the currently using of energy directly or indirectly by this sector approximately 30% of global consumption. But the fact is food processing industry plays a vital for economies all over the world (Banerjee, et al., 2012).

The food processing industry needs huge energy because of heating, oven cooling and electricity for production machinery and that demand almost the third direct of global energy consumed behind the farm gate (White, 2007). Apart from processing food energy used for packing the product, which is high energy consumption due to plastic and aluminum (Muir, 2010). In addition, for processing fish products energy requires for the icing, conserving, producing a meal, etc. which consume around 0.5PJ per annum.

Although the importance of renewable energy in the manufacturing industry is indisputable in the food, sector it's often negligible especially in low economic countries. There is a lack of studying on renewable energy innovation in the food processing sector and therefore this is an area that needs continuous research (Bossle, et al., 2016). Renewable energy, especially in the food processing industry, is conceptualized as “the development or application of new products, process or services that affect the business benefits. Renewable energy innovation has the ability to hold particular features, such as creating important links and positive trade especially in competitive products and services, like products differentiation, prices, performance, etc. (Carrillo-Hermosilla, et al., 2010).

Renewable energy is the ultimate option for food processing industry which can easily substitute the fossils and improve the sustainability and can reduce the food cost comparatively the oil price (JRC science and policy report, 2015). According to IRENA (2014), the food industry can produce more than 50% of its energy consumption through renewable energy. In addition, energy recovery from food waste through biogas production can add more energy production for the FP industry which ultimately reduces their production cost (Hall & Howe, 2012).

## **SME Business practices associated with economic contribution:**

The business structure in today's context keeps changing rapidly and creating a deal of business uncertainty (Bahri, et. al., 2011). The recent business environment forces the firms especially SME businesses to be more innovative and regularly review their business process and practices to stay in a competitive market. In those cases, firms need to more active and pay their attention to performances (Kennerley and Neely, 2003; Raymond, et al., 2009; Cocca and Alberti, 2010). However, very few SMEs in the market that applies various performance and measurement tools which is often identified by the lack of managerial expertise and resources (Garengo, et al., 2005). According to Bahri, et. al., (2010), there is a clear relationship between SMEs business practices and measurement over economic contribution.

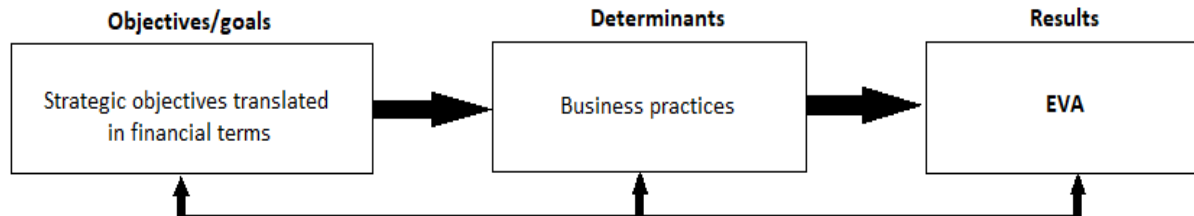
The economic contribution can be defined by addressing the broader and specific case of economic activity cycles through its specific industries existing economy (Watson, et. al., 2007). In other words, economic contribution defined by its gross change in the existing economy. Gross change of the specific industry often points out the economic value added (EVA) areas where need close attention and modifications. Business practices are the best tools especially for the SME's to evaluate that economic value to the industry. economic value has an advantage over various performance and measurement tools like PMMS, balanced scorecard (Kaplan and Norton, 1992), etc. especially in performance indicators on four axes like (financial, customer, internal process and learning) but doesn't explain how these indicators can be transformed to business performances (Bahri, et. al., 2010).

In that case, business practices can translate the strategies into various activities that can be performed by employees. These systems require financial measures, business practices, and firm strategy are inconsistent level to



get the firms performance management (Bahri, et. al., 2010). Becker, et. al., (1997), said, misalignment between business practices and strategies are “deadly combination”. On the other hand, Raymond, et. al., (2009) clearly said, better business performance only possible if there is a proper alignment between strategy, business practices, and economic value-added facilities feedback, which helps to make it possible review and adopt the firm objective goals to market changes (Atkinson, et. al., 1997).

**Figure 1. Alignment between strategy, business practices, and EVA.**



Sources: Bahri, et. al., 2010. Economic value added: a useful tool for SME performance management.

However, Kennerley, et. al., (1997) believe that, some business practices have direct impact on economic value creation and previous research also has shown a positive impact on performances (Bahri, et. al., 2010) such as (1) Sales management practices, (2) Manufacturing and equipment management practices and (3) Working capital management practices.

## RESEARCH METHODOLOGY

The literature review was based on constructive sources and included diverse research methods. Mostly, empirical research papers, conceptus papers, conference papers and literature reviews with a strong focus on achieving competitive advantage through renewable energy in industry. The literature search was being conducted by a number of databases, renowned journals and article publishers such as Google Scholar, Emerald Insight, Research Gate and Science Direct. The mentioned databases were chosen because of large coverage of interdisciplinary, peer-reviewed journals in this research area. The research was conducted between January and March 2018. The research began with a specific question area of interest to the study. The research subject covered with a range of data from the Bangladesh Bureau of Statistics and various related research organizations.

The research data considered a total number of 40 papers, were included in the last 10 years of theoretical and practical data related to global competitive advantage, global renewable energy, and food processing industry, especially in Bangladesh. Various related literature comes up with robust finding in terms of the relationship between competitive advantage and renewable energy. So, the research is extended further to find out the possible connection between this relation to the food processing industry in Bangladesh.

The data were collected through an annual report from statistics bureau of Bangladesh, official ministry report of Bangladesh like finance, industrial, national revenue, etc., associated organizations like IDCOL (Infrastructure Development Company Limited), BSREA (Bangladesh Solar and Renewable Energy Association) and various trusted organizations report.

In this part of the analysis, hypotheses test is being considered achieving the aim of this paper. In this test, two sets of hypotheses been calculated. One is the Null hypothesis ( $H_0$ ) and another is the Alternative hypothesis ( $H_1$ ). The significant test for correlation must need an expressed way either one-tailed or two-tailed test. In this statistical analysis, the two-tailed test been conducted. All collected quantitative data has been analyzed through SPSS (statistical univariate) software.

## RESULTS

Most of the research studies that investigate the food processing industry in Bangladesh, end up with the conclusion of prospects and challenges of the sectors. None of the studies consider the possible aspects and innovation that can lead the industry more sustainable and competitive in the national and global market. However, it is very important for the industry to think competitive strategy by adopting innovation like renewable energy. The raising issues of competitive price and energy demand should be considered in the first place. Aiming at addressing this gap, with empirical research and knowledge related to studies on competitive advantage and renewable energy in the food processing industry, results from the various investigation are presented in this section.

### **Energy cost and Food processing industry:**

In this part of the analysis, it's important to identify the impact of energy cost in the food processing industry, particularly in Bangladesh. In this research, it's assumed that energy cost has a high impact on the food processing industry and that can affect the annual growth rate for the industry. To find out the association between energy cost and annual growth rate, the correlation has been done with last 4 years data.

According to the statistics, the correlation between energy cost and the annual growth rate is  $r = .775$ . Where significant of 2-tailed result  $p = .225$ . And the number of data respectively  $n=4$ . Based on correlation results, it shows there is a positive moderate relationship between energy cost and annual growth rate because of the result of correlation  $r = .775$ , which is in between the range of correlation  $-1.0$  to  $+1.0$ . But this relationship is not significant because the value of  $p = .225$ , which contradicts with the actual value of significant  $p \leq .05$ .

### **Renewable energy and Food processing industry:**

The primary objectives of this research demand the relationship between renewable energy and food processing industry. After conducting the correlations between two variables, it scores a significant strong positive result. The correlation between the variables is  $r = .998$ , where significant 2-tailed scores  $p = .040$ . And the correlation includes an asterisk (\*) which means the correlation is significant at the 0.05 level (2-tailed).

### **Food processing industry and Manufacturing GDP:**

Correlation analysis has also been carried out between the annual growth rate of the food processing industry and GDP of manufacturing production to identify the possible relationship. The reason behind this relationship is to find out whether the annual growth rate has any impact on manufacturing GDP as well as national GDP. Because if any production sector helps to increase the national GDP, then that sector needs more attention especially by adopting innovation. In this part of the correlation analysis, it shows the correlation score is  $r = .986$  with 2 asterisks (\*\*) which indicates the strong relationship between the variables, where significant 2-tailed score  $p = .000$ , and the number of data respectively  $n=6$ .

### **Food processing Industry, urbanization, and export:**

The literature of this study shows that there could be a connection between urbanization and export of process food over the annual growth rate of the food processing industry. The correlation analysis has been conducted to find out whether there is any connection between those variables or not. Based on the analysis results it shows, the correlation between export of process food and annual growth rate hit the score  $r = -.498$ , which indicates that negative relationship

between these two variables, where the significant 2-tailed level is .314, which clearly shows the correlation between these variables is a non-significant negative relationship. The possible reason behind this result is less growth of export in agro-process food. On the other hand, the correlation between urbanization and annual growth rate score  $r = .979^{**}$ , which means strong strength of association between these variables, where significant 2-tailed level is  $p = .001$ . Any significant score  $p \leq .05$  means, there is a significant relationship. The result of the correlation between urbanization and export of process food also shows the negative result where  $r = -.546$ , where the significant level is  $p = .263$ , which clearly says, the relation between these two variables is a non-significant negative relationship.

## DISCUSSIONS

In this paper, the interconnection of renewable energy with the food processing industry shows a positive impact where competitive advantage can be achieved. In Bangladesh, the food processing industry facing a high cost of energy price and lack innovation which directly affect the production cost. In this competitive market, product value is one of the most important targets for the food company. Although SMEs food industry always suffers from the lack of resources and innovation to pursue the achievable goals. But the results show innovation has a positive influenced over the annual growth.

Increasing urbanization also score a positive impact on annual growth, which needs to pay more attention to food companies. Rapid urbanization can provide a new business opportunity for the food processing industry over the competitive market by adopting renewable energy. Although increase population urges for food demand but only competitive value by the food processing industry can sustainable in this emerging sector.

Export of process food and GDP of manufacturing production also scores moderate positive relationship, which indicates their economic contribution into the business. But to pursue further sustainable and remain economic in the market, there is no alternative than adopting renewable energy in the food processing industry.

## CONCLUSION

The importance of studying competitive advantage and renewable energy over food processing industry become extremely relevance since studies in this area become more fragmented and sustainable consumption, which create some difficulties during its broader analysis. Generally, food processing industry knows as a mature and slow-growing business are, which indicates a lack of R&D investment and tend to slowly move on introducing innovation in the market (Costa and Jongen, 2006). Yet, opportunities arising from the global competitive market and increased population demand, letting the company for creating a positive cycle for renewable energy and competitive advantage.

Regarding introducing the innovation, companies should rethink about the strategic decision that also a managerial concern, as well as a closer stakeholder. Government support can also be found a significant direction in terms of resources and adopting innovation.

This research brings a significant contribution to the study of interconnection between competitive advantage and renewable energy over the food processing industry. Theoretical contributions can be related as a fact that renewable energy can introduce in the food sector, in order to achieve a competitive and sustainable market. Previous researchers (Longenecker and Ariss, 2002; Brem, et. al., 2015 and others) have mainly focused on competitive advantage through product innovation and management education. In this research, this approach is extending to analyze and determine the interconnection of competitive advantage and renewable energy over small and medium food processing industry.

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# EMPHASIZING *MÈTIS* WITHIN THE DIGITAL ORGANIZATION

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## ABSTRACT

*Current and near future organizational strategies are placing great emphasis on automation, robots and AI – with the aim of improving efficiency (productivity), and maximizing profitability. This paper shows how these same methods, in the absence of adequate human intervention, can seriously affect an organization's ability to deal with uncertain and ambiguous situations. Dealing with uncertainty and ambiguity is what humans are capably better at than machines or AI across *mètis* knowledge. This inconspicuous and ambiguous category of human knowledge is briefly re-visited. Management can help enable *mètis* by encouraging individual and social practice, as well as dialogue within the workplace. Furthermore, organizations must consider partnering human decision makers with AI when facing the mutually inter-dependent aspects of uncertainty, complexity and ambiguity.*

**Keywords:** Artificial intelligence, uncertainty, ambiguity, *mètis*.

## INTRODUCTION

Historically, robots and computers were used to eliminate cognitively monotonous, physically demanding, repetitive or dangerous jobs (Wallén, 2008). But high level reasoning can now be codified via algorithms, resulting in computers outdoing humans both in terms of speed and performance in a variety of tasks (Autor, 2015). Furthermore, where more tacit type tasks are involved, and thereby where engineers are unable to initially program a machine to simulate the task in question, machines can eventually master the task through a process of exposure, training, and reinforcement – known as machine learning (or ‘deep learning’) – Autor, 2015. Over 30% of tasks necessitating significant amounts of tacit knowledge can now be taken over by algorithms (Manyika et al, 2017). Working with Big Data are analytics to reduce machine error and improve efficiencies of machine time-motion performance.

As such, the overall quest for continued cost reductions, in not only monotonous tasks but in more complex professional tasks requiring elaborate analysis, calculations and certain levels of tacit knowledge, are not only being pursued across reduced labour costs, but also across productivity improvements via increased speeds and efficiencies. The *modus operandi* continues to be doing more with less (Autor, 2015).

Yet, many professional tasks currently being considered as being replaceable by learning algorithms still require intervention on the part of human professional experts when dealing with situations involving weak and ambiguous signals (Faraj et al, 2018). As such, this conceptual paper will first critically examine the discourses and realities on Artificial Intelligence (AI). We will then argue how learning algorithms are unable to successfully deal with situations involving uncertainty as well as multiple interpretations, i.e. ambiguity (Kahneman and Klein, 2009; Dejoux and Léon, 2018), while conversely, human expert knowledge workers have the capacity to do so across the mobilisation of what is known as *mètis* knowledge and skills (Baumard, 1999). Finally, we briefly discuss management implications in enabling *mètis* within the workplace.

# THE DISCOURSES AND REALITIES ON ARTIFICIAL INTELLIGENCE (AI)

Various applications and techniques based on learning algorithms fall under the broad umbrella of what is termed “AI” (Jarrahi, 2018). The concept of AI is often loosely defined as ‘intelligent’ systems with the ability to ‘think’ and ‘learn’ (Russell and Norvig, 1995), encompassing what is known as machine learning. Machine learning consists of algorithms which enable systems to ‘learn’ (Jarrahi, 2018), that is, improve their outputs based on experience (or previous iterations). Deep learning, in turn, is a subset of machine learning involving artificial neural networks (a set of algorithms inspired and modeled loosely after the human brain) that ‘learn’ from large amounts of data. These neural networks are designed to identify numerical patterns extracted from numerical vectors into which all-real world/sensory data (ex. images, sounds, text or time series) is translated (Hagan, 2014). Deep learning across neural networks finds correlations across *approximations* (Palit and Popovic, 2005).

Artificial Intelligence’s (AI) visibility and optimism in recent years is best captured by the developments associated to IBM’s Watson and Google DeepMind’s AlphaGo, which beat human champions at *Jeopardy* and *Go* (Dejoux and Léon, 2018). For Watson, it has been claimed that its ‘natural language’ algorithms (as specific forms of machine learning), across the use of approximations and probabilities, has “the ability to *understand* nuanced human-composed sentences, and assign multiple meanings to terms and concepts” (Jarrahi, 2018). It has been argued that such machine learning capabilities allow Watson to learn from experience and interaction with data, and to “develop intelligent solutions based on past experience” as well as to give it the ability to “discern cancer patterns” (2018: 578).

Before deconstructing the above events and discourse associated to both Watson and AlphaGo, we must first return to Turing’s (1950) well-known paper reflecting on the possibility of machines being intelligent. Here, he proposed a method for evaluating whether machines could exhibit intelligent behavior equivalent or indistinguishable from that of a human, across the Turing Test. The rationale was that if a computer could imitate the sentence of a human being would that not imply that the computer itself was sentient? The test itself would consist of a human evaluator judging natural language conversations between a human and a machine, and would know in advance that one of the two partners in conversation was a machine. All participants would be hidden from one another with exchanges limited to a text-only channel such as a computer keyboard and screen. If the evaluator could not reliably distinguish the machine from the human, the machine would pass the test. The test results would depend on how closely the machine’s answers would resemble those of a human. Also, the test would not include anything specific – no complex problem solving or requests to create art. To date no machine has passed the Turing test.

## Watson and AlphaGo de-constructed

Watson was first developed and deployed against humans on a difficult, natural language-based task, namely, understanding textual clues and matching them to answers in the game of Jeopardy! Natural language processing (NLP) is at the core of such tasks as language translation, language interpretation and language generation. Yet, as IBM’s Ferrucci (2012) points out, “interpretations of text can be heavily influenced by personal background knowledge about the topic or about the writer or about when the content was expressed.” In other words, context is everything. Words in isolation, or sentences and entire discourses stripped from its context in a particular culture, at a particular time do not mean the same (Weick, 2009; Collins, 2010). That is why NLP is hard and still very narrow in focus (Ferrucci, 2012). Watson’s computational treatment of natural language consists of performing a well-defined language task. Unlike in everyday conversation, the majority of questions are asking for factoids, whereby most answers (over 90%) are also Wikipedia titles. The Watson team astutely exploited a few “hooks” and identified certain focus words such as “this” and other demonstratives and noun references (Ferrucci, 2012). Hence, Watson’s performance does not require a deep understanding and explanation of general natural language. As Bernie Meyerson, IBM’s chief innovation officer explains, Watson, which cannot, and will never be able to pass the Turing Test, can still be helpful in a lot of industries, such as medicine, which are awash in data (Captain, 2017). The term “artificial intelligence” such that a computer can think like humans is something that Meyerson and IBM avoid, while favoring

the term “augmented intelligence”, in the sense of acting as an aid in people’s decision-making capabilities (Captain, 2017). Yet, the method in which Watson has been developed and trained for discerning cancer lesions and proposing possible cancer treatments raises additional questions and concerns in regards to possible knowledge impoverishment associated to the levels and nature of knowledge de-contextualisation occurring prior to its re-construction and transfer to non-expert practitioners (Tsoukas, 2003; Weick, 2009; Collins, 2010), which for purposes of space and length, go beyond the current scope of this paper. Suffice to say that at the heart of Watson is a cloud-based supercomputer to digest massive amounts of data — from doctor’s notes to medical studies to clinical guidelines. Its treatment recommendations are based on training by human overseers, who laboriously feed Watson information about how patients with specific characteristics should be treated. These human operators consist of a couple dozen physicians at a single, though highly respected, U.S. hospital: Memorial Sloan Kettering Cancer Center in New York. Doctors there are empowered to input their own recommendations into Watson. One of the major challenge involves getting the machine to deal with the idiosyncrasies of medical records: the acronyms, human errors, shorthand phrases, and different styles of writing. Another issue is that Watson essentially ignores tacit situational knowledge from the field which written records on its own can never fully capture (Tsoukas, 2003; Collins 2010). In 2017, the medical website STAT reported the computing system had indeed recommended “unsafe and incorrect” cancer treatments. In the documents obtained by STAT, doctors trying to use Watson to help design treatments complained the system wasn’t ready to practice medicine (Chen, 2018).

When we turn to AlphaGo’s impressive wins at the game of *Go*, we again see a superhuman performance in a very specific sphere of activity – yet to say general intelligence, would be false. Combined with existing ‘deep learning’ approaches (i.e. imitation training) and predictive algorithms based on Monte Carlo tree searching and neural networks, Google’s DeepMind (AlphaGo) was able to beat 18 time Go world champion Le Sedol 3 games out of 4 in early 2016. Yet, AlphaGo is still unable to read and *understand* text or carry out a spontaneous conversation. As Oren Etzioni (CEO, Allen institute for Artificial Intelligence) explains, “understanding a single sentence can be a lot more complicated than playing Go”. “For all its difficulty, Go is still an artificial problem with very simple rules,” adds Pedro Domingos, a computer science professor at the University of Washington (Taves, 2016).

## **The Significance of Natural Language and Conversation**

Numerous studies and papers have depicted the nature, role and significance of natural language and conversation from a social, psychological, communication, sense-making, knowledge, power and organizational perspective (Armstrong and Ferguson, 2010; Collins, 2010; Weick, 1995; Tsoukas, 2009). In this paper, our interest is simply to reiterate language and conversation’s inherent complexity, uncertainty and ambiguity (Marneffe et al, 2012; Piantadosi et al, 2012). For example, McComb and Semple (2005) show the inter-relationship between social and language complexities, while Maddieson (1984) and Lupian and Dale (2010) present the phonological and morphological complexities of language, respectively. In turn, uncertainty phenomena in language/discourse and its own inherent complexities have been examined from various aspects, including syntactics, semantics and pragmatics (Marneffe et al, 2012; Saurí and Pustejovsky, 2012). Finally, language and conversation is inherently ambiguous (ex. sentence attachment, semantics, pragmatics, discourse, etc.), and paradoxically, it is these same ambiguities which give language and conversation its effective communicative function (Piantadosi et al, 2012).

Turing’s conversation test is indeed a complete test of complexity, uncertainty and ambiguity. In the following sections, we return to consider in more detail each of these environmental aspects (complexity, uncertainty and ambiguity) in regards to organizational decision-making when comparing human and machine capabilities.

## **CHALLENGES IN DECISION MAKING**

Context plays a vital role in decision making (Papadakis et al, 1998). In turn, environment is one of the key factors to consider within organizational contexts, and comprises of three related challenges to decision making processes: uncertainty, complexity, and ambiguity (Snow et al., 2017; Jarrahi, 2018). According to Pomeroy (1997), uncertainty



is where “the future states are obviously not known with certainty” (p. 5) and arises from a lack of information about the environment. Complexity involves “situations...characterized by an abundance of elements or variables”. (Jarrahi, 2018, p. 5). Ambiguity is related to “the presence of several simultaneous but divergent interpretations of a decision domain” (Jarrahi, 2018, p. 5). In the following sub-sections we examine these three environmental challenges.

## Uncertainty

According to Choo (1991), uncertainty is defined as a lack of information about the alternatives and/or their consequences, thus rendering the interpretation of a situation more difficult. Walker et al (2003) identify several levels of uncertainty as related to modeling. Variability uncertainty is due to inherent variability in the phenomenon, thus corresponding to indeterminacy. Context uncertainty is related to the choice and delimitation of system boundaries and the subsequent framing/formulation of the problems addressed within the confines of those boundaries. As such, context uncertainty can be seen to be related to ambiguity. Model structure and inputs uncertainty (aka conceptual uncertainty) can also play a role in ambiguity, whereby they involve the definition of relevant variables to be included or excluded within the framing of the problem. The remaining types of uncertainty as per Walker et al (2003) involve different forms of incomplete knowledge or information regarding a situational phenomenon.

According to Kahneman and Klein (2009), tacit knowledge about a situation within a context of uncertainty allows individual experts to recognize a pattern that they have stocked in their memories while making intuitive decisions. As such, humans use their intuition and their ability to recognize patterns that machines (AI) do not have or sense (Jarrahi, 2018). Intuition enables experienced decision makers under pressure to act fast, whereby most of the time they only think of one option across natural and unconscious cognitive processes (Dejoux and Léon, 2018). However, in most uncertain situations, there are components of certainty which AI can retrieve and make forecasts, using probabilities (Pomeroy, 1997). Yet, unlike board games, in which the probability of the next action can be calculated, real-world decision making often involves uncertainty, and the sole reliance on probabilistic, analytical thinking tends to be insufficient (Campbell, 2016). As such, the support of machines within contexts of uncertainty can be complementary to human understandings of the situation by providing real-time information to support the decision maker across statistics and specific pattern recognizing algorithms (Jarrahi, 2018; Dejoux and Léon, 2018). Humans, with their global perspective, experience and ‘deep smarts’, are more suitable to take the final decision by leveraging insight and a qualitative assessment that is rooted in years of tacit experience and personal judgement (Leonard and Swap, 2004; Sadler-Smith and Shefy, 2004).

## Complexity

Complex situations involve an abundance of elements or variables and can demand the processing of massive amounts of information at speeds much greater than the cognitive capabilities of even the smartest human decision makers (Jarrahi, 2018). AI’s superior computational and analytical capabilities has surpassed humans in complex tasks (Marwala, 2015). AI can analyze different layers of complex information and masses of data coming from various sources in order to recognize patterns and weak signals (Parry et al., 2016). However, AI algorithms are also biased in that they “are formalized opinion that have been put into code” such that critical thinking is paramount (Dejoux & Léon, 2018: 205; Faraj et al, 2018). As such, human actors should critically review and control AI decisions (Dejoux & Léon, 2018). For example, has the correct question been posed in regards to the situation at hand (Brynjolfsson and McAfee, 2014)? Indeed, being critical means being able to raise new questions and reframe problems (Dejoux & Léon, 2018). An absence of human intervention on this aspect risks setting off political and knowledge biases manifesting themselves into self-fulfilling organizational structuration (Faraj et al, 2018). It is interesting to note that complex situations can sometimes be resolved by humans who experience “gut feel”, as if they were making use of their instincts, such as instantaneously understanding whether to launch a new product, whether hiring one person is a good idea, etc. (Sadler-Smith and Shefy, 2004: 78). In this sense, freestyle chess players have adopted the *centaur* approach, marrying human intuition, improvisation and creativity with a computer’s brute-force ability to calculate a staggering number of chess moves, countermoves and outcomes. Teaming the two in chess, experts say, produces a force that plays better chess than either humans or computers can manage on their own (Kasparov, 2017).

## Ambiguity

Weick (1995) makes a clear distinction between ambiguity as too many interpretations of a situation, and uncertainty as being caused by a lack of information. Ambiguity refers to the meaning of a situation and which frame should be applied to make sense of it. Hence, “while uncertainty can be located at the boundary between knowing and what is yet unknown within a certain frame, ambiguity can be located at the boundaries between different frames of knowledge or different kinds of knowing” (Dewulf et al, 2005, p. 117). Conversely, Walker et al (2003) provide us with a more nuanced overlap between uncertainty and ambiguity, in which both context and conceptual uncertainty are shown to be strongly related to ambiguity.

Humans have an advantage over AI in ambiguous situations due to their soft skills and their perception (Jarrahi, 2018). AI, as an analytical tool, is not able to analyze the subtlety of human interactions and communications; nor can it contextualize information (Jarrahi, 2018). AI can perhaps analyze sentiments and predict reactions that are likely to occur as a result of organizational decisions, yet does not know how to interact with humans, nor how to motivate people or convince them of decisions under situations of ambiguity that will rally different stakeholders. Humans, on the other hand, use social intelligence and skills in situations of ambiguity to negotiate/convince others and understand the context in which the decision is taken - regarding social and political dynamics - (Jarrahi, 2018).

In the following section, we present the unique human knowledge category of *Mètis*, providing human experts the ability to deal with both ambiguity and uncertainty within complex environments.

## ***MÈTIS* AS AN AMBIGUOUS AND INCONSPICUOUS CATEGORY OF KNOWLEDGE**

*Mètis* is a form of knowledge that is lived out, acquired and renewed across human practice and experience to face the most daunting situations and challenges. Détienne and Vernant (1978) emphasize its ambiguous nature as being called upon in “situations which are transient, shifting, disconcerting and ambiguous, situations which do not lend themselves to precise measurement, exact calculation, or rigorous logic” (p. 3-4). In turn, Baumard (1999) characterizes its ambiguous nature across two diadic pairs working in complementary fashion: namely, explicit vs tacit knowledge with individual vs collective knowledge.

Scott (1999) describes *mètis* as a form of wily intelligence and adaptable cunning described by Ancient Greek mythologies as an effective method to face adverse or confrontational situations against powerful adversaries in unstable and complex environments. “In a sense, *mètis* lies in that large space between the realm of genius, to which no formula can apply, and the realm of codified knowledge, which can be learned by rote” (Scott, 1998: 320). Aristotle singled out navigation and medicine as two activities in which *mètis* acquired across long experience was indispensable to expert performance. “These were seen as *mètis*-laden activities in which responsiveness, improvisation, and skillful, successive approximations were required...The problem, as Aristotle recognized, is that certain practical choices cannot, even in principle, be adequately and completely captured in a system of universal rules.” (Scott 1998, p. 322). *Mètis* is used in sometimes similar, yet never identical, situations requiring quick and practiced adaptations that are second-natured to expert practitioners. *Mètis* cannot be simplified into deductive principles found in book learning alone, because the contextual environments in which it is exercised are too complex, non-repeatable and non-predictable in which general formal procedures are impossible to apply (Scott, 1998).

Contemporary examples of *Mètis* include surgeons, aircraft pilots and engineers, whereby all of these technical domains involve both uncertainty and ambiguity (Schrader et al, 1993). *Mètis* involves *mindfulness* which consists of an expansive ‘attentional breadth’ or directing attention toward external events and phenomena as well as internal states (Dane, 2013). It is a focus on the present moment which fosters regular updating. This increased attentional breadth means more cues can be considered in the course of sensemaking, which in turn, increases the vividness with which people interpret their surroundings (Weick and Sutcliffe, 2006). This vividness also enables

individuals and collective groups to quickly identify effective courses of action with their present circumstances, perform them effectively and/or improve their capabilities to more swiftly cope with what is seen (Dane, 2013).

## Management Implications and Policy

Unexpected emergencies and challenges present themselves across “dynamic ambiguity” (Baumard, 1999, p. 35). Such ambiguous situations may foster puzzlement and indecisiveness despite peoples’ possession or access to impressive levels and quantities of codified knowledge (Baumard, 1999: 2). Factors contributing to this, includes the low degree of awareness people (or organizations) have of the knowledge they have access to as well as the low degree of internalisation or embodiment of such codified knowledge (Baumard, 1999; Dreyfus and Dreyfus, 2005). On the other hand, Weick (2015) argues that ambiguity within unexpected or sudden crises can only be addressed across intentional ambiguity; that is, ambiguous frames of minds generating impermanent interpretations. *Mètis* would appear to provide this across its “polymorphous knowledge” (Baumard, 1999, p. 62). It is a combination of ‘street smarts’ and ‘deep smarts’, the former being the ability to quickly detect and to quickly react to anomalies, and the latter as a deep theoretical *and* practical understanding and knowledge of associated patterns, phenomena and anomalies of a given domain (Hatt, 2007; Leonard and Swap, 2005).

In turn, management must support *mètis* within the workplace. This is achieved across the encouragement of i) social practice and dialogue (Colins, 2010; Dreyfus, 1972 and 1992), and ii) individual repetitive practice of technical knowledge in various contexts involving indwelling leading to transformations in both focal and subsidiary awareness (Polanyi, 1962 and 1975; Tsoukas, 2003). There is, however, an additional level of resolution to be found within both (i) and (ii). In both cases, a wariness, vigilance or more precisely, a “mindful experience” across “mindful observation” is called upon in order to achieve the required cunning and skill (Baumard, 1999; Aftel, 2014).

Uncertainty, complexity and equivocality are not mutually exclusive. As such, decision-making often involves all of these three characteristics of uncertainty, complexity and equivocality (Koufteros, Vonderembse, & Jayaram, 2005). Most organizational decision-making is best handled across the use of both analytical and intuitive approaches (Hung, 2003).

As such, a partnership between human decision makers and AI should also be considered in which:

1. Humans and AI can collaborate to deal with different aspects of decision-making. AI is superior with issues of complexity, allowing humans to focus on uncertainty and equivocality.
2. Humans should still however maintain overall control and oversight of decisions in complex situations, since humans have the capacity to reframe problems or pose new questions across critical thinking.

Decisions in complex situations still entail aspects of uncertainty and equivocality, further justifying human oversight. In turn, human decision makers facing situations of uncertainty and ambiguity can use AI to assist them.

## CONCLUSIONS

In this paper, we re-examined the discourse and realities associated to AI by specifically de-constructing IBM’s Watson and Google’s AphaGo. In both cases, neither is anywhere near passing the Turing Test on natural language conversation. Such conversation involves uncertainty, complexity and ambiguity – three environmental challenges which also play a role in regards to organizational decision making.

An examination of AI vs human decision making capabilities in the face of uncertainty, complexity and ambiguity showed that humans, across *mètis* knowledge, are still better than AI in situations of uncertainty and ambiguity, while AI has an edge in situations of complexity. Management’s role in enabling *mètis* includes the encouragement of individual and social practice, as well as dialogue within the workplace. Furthermore, organizations

must partner human decision makers with AI in situations of uncertainty, complexity and ambiguity, whereby humans maintain overall control and oversight.

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# STRATEGIC LEARNING ALLIANCES IN THE FOOD RETAIL INDUSTRY IN BANGLADESH: ENHANCING ORGANISATIONAL PERFORMANCE

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## ABSTRACT

*The aim of this research paper is to ascertain how strategic learning alliances may enhance the organisational performance of the food retail industry in Bangladesh. This study is informed by a mixed methods approach. For the quantitative data, a total of 192 surveys were collected and were analysed using ordinal regression and Spearman's rho techniques. Further, for the qualitative data, a total of 16 interviewees were conducted and were analysed using thematic analysis technique. The result demonstrates a significant relationship between strategic learning alliances and organisational performance. Further, the result also demonstrates learning alliances can enhance organisational performance through enhancing knowledge and skills, enhancing organisational culture, enhancing operational efficiency, increasing revenue and profit and so forth. Drawing from the finding, it is suggested that organisations in the food retail industry in Bangladesh should create strategic learning alliances to overcome existing challenges and enhance their performance. This study contributes to the academic debate of strategic alliance by drawing insights for Bangladesh's food retail industry. What's more, it is hoped that this research will attach a global dimension to an area that is under-researched. Insights from this study can be used by managers as a resource upon which to enhance performance and compete more effectively.*

**Keywords:** Learning alliances, Food retailing, Organisational performance, Bangladesh.

## INTRODUCTION

Alliances, in the form of strategic alliances, have been of significant interest to scholars and practitioners over the past two decades (Albers, Wohlgezogen and Zajac, 2016). Although, research has previously been conducted regarding strategic alliances (Duysters, Duysters and De Man, 2011; Spekman, Forbes, Isabella and Macavoy, 1998;), there are still gaps in knowledge, particularly in regard to strategic alliances in emerging economies such as Bangladesh, as previous research has mostly focused on strategic alliances in the context of western society. For instance, Muthoka and Oduor (2014, p. 87) suggest that “future studies should concentrate on the effect of strategic alliances on the performance of sector specific firms”. Thus, the issue of performance of these strategic alliances in specific sectors is of academic interest. And hence, the current study has focused on how strategic learning alliances can impact upon organisational performance in the food retail industry in Bangladesh.

The food retail industry in Bangladesh is facing several major challenges. For instance, there is a shortage of experienced manpower to operate the business (Hussain and Leishman, 2013). More interestingly, there is limited academic literature that addresses these concerns, with little focus on strategic alliances in the food retail industry in Bangladesh. In fact, the concept of strategic alliances has received relatively little attention within the context of the Bangladesh food industry. Given this background, the purpose of this study is to investigate how strategic learning alliances can benefit the food retail industry in Bangladesh and highlight just how understandings from this research can help to contribute to ongoing academic debates.

# LITERATURE REVIEW AND RESEARCH QUESTION

In order to survive in an increasingly dynamic and complex globalised business environment, companies have to do more than just adapt. In fact, the future success of organizations depends on the ability to learn and create knowledge (Luthans *et al.*, 1995). Furthermore, Bronder and Pritzl, (1992) have suggested that learning is becoming the principal tool for future competitiveness in strategic relationships. Thus, learning is a critical resource for business success, survival, and competitiveness.

Crossan and Inkpen (1995) suggested that the ability to extract skills and knowledge through alliances may become vital to survival for an organisation. What's more, creating strategic alliances to learn from a partner can be a more effective and faster method of acquiring specific knowledge (Osland and Yaprak, 1995). In a similar vein, Hamel (1991) proposed that collaboration might create an opportunity for one partner to adopt the skills of the other and thereby develop its position within and outside the alliance.

Furthermore, Morrison and Mezentseff (1997) point out that a learning alliance is aimed at establishing a mutual relationship based on co-operation, not competition. Thus, this relationship is developed through a process which involves elements such as creating a learning environment and having a systemic perspective. In fact, this learning environment enables alliance partners to build a relationship which enhances the strategic fit between the companies for the long term. This helps to improve organisational performance (Muthusamy and White 2005). In addition, partners that work together will eventually come to new knowledge and learn from each other. These changes through a strategic learning alliance help to improve the performance of the organisation (Grant and Baden- Fuller 2004; Muthusamy and White 2005).

In addition, through a learning alliance, a company has an opportunity to gain useful, relevant, and interesting knowledge that can be used to complete the puzzle of the company's competitive position and choices (Vuori and Okkonen, 2012). Further, some scholars suggest that the formation of a strategic learning alliance can enhance organisational performance by offering synergy effects (Zineldin and Dodourova, 2005; Kock *et al.*, 2010; Bigliardi *et al.*, 2011).

However, despite the synergy that strategic learning alliances sustain, there may also be some difficulties relating to the individual competences of the associated organizations. The biggest risk and cost associated with the learning alliance are that partners can lose their sources of competitive advantage to their partners very rapidly if they are not careful (Lei and Slocum, 1991). If this appears within the collaboration, the less-reliant partner may cause a threat to their alliance partner/s by becoming a powerful and direct competitor (Lei and Slocum, 1991). Further, Bengtsson *et al.* (2010) found a negative correlation between a strategic learning alliance and organisational performance. According to Bengtsson *et al.* (2010), the main risks associated with the forming of a learning alliance seem to be knowledge spill-over and the resulting opportunistic behaviour of alliance partners. This risk is connected to the competition dimension of co-opetition and resulting in poor organisational performance. In course of this research project, the following central research question has to be answered: *How can strategic learning alliances enhance the organisational performance of the food retail industry in Bangladesh?*

## METHODOLOGICAL APPROACH

A mixed methods approach was adopted to help better understand the research problem and answer the research questions. For the quantitative data, 177 surveys were collected in a personal interviewing format, and 15 collected using the web-based approach, thus yielding a total of 192 responses were obtained for the quantitative element of the study. For the qualitative data, interviews were held with 4 experts, and a further 12 interviews held with directors of different supermarkets and convenience stores within the food retail industry in Bangladesh, thus yielding a total of 16 interviewees.

In selecting a sample size for the quantitative survey, the researcher employed probability sampling to determine a sample size as probability sampling is the most suitable technique for survey research (Saunders *et al.*,



2016). Further, in selecting the sample size for the qualitative interview, the researcher employed a non- probability sampling approach. Sampling techniques included convenience and judgement sampling. Interview participants were selected that were most convenient, most easily accessible and agreed to participate in the research. Further, the non-probability technique is a suitable approach to case study research.

The researcher used ordinal regression and Spearman's rho to ascertain the relationship between strategic learning alliances and organisational performance. Further, the thematic analysis technique was used to analyse the qualitative data because it is a widely used qualitative analytic method (Roulston, 2001). More importantly, thematic analysis is a flexible method and describes data in rich detail (Braun and Clarke, 2006). It is this richness in detail that the current study strived to achieve. Further, all identifying information for individuals and organisations was removed, and pseudonyms were used in writing the results of the study. Thus, participants were known by pseudonyms to help protect their privacy and uphold the principles of privacy and confidentiality.

## RESULTS AND DISCUSSION

### Enhancing Organisational Performance through the Learning Alliance

Ordinal regression test and correlational analysis were used to examine the relationship between learning alliances and organisational performance. It was hypothesised that:

H0: There is no association between strategic learning alliance and organisational performance.

H1: There is an association between strategic learning alliance and organisational performance.

Results of ordinal regression is illustrated in the table 1

**Table 1: Result of ordinal regression.**

							95% Confidence Interval	
Estimate			Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	[OP = 1]	-16.740	2.190	58.448	1	.000	-21.032	-12.449
	[OP = 2]	-13.744	1.764	60.686	1	.000	-17.202	-10.286
	[OP = 3]	-9.322	.982	90.113	1	.000	-11.247	-7.398
	[OP = 4]	-2.597	.546	22.617	1	.000	-3.667	-1.526
Location								
	[SLA=1]	-5.210	1.490	12.226	1	.000	-8.130	-2.289
	[SLA=2]	-6.993	1.377	25.794	1	.000	-9.692	-4.294
	[SLA=3]	-4.075	.914	19.896	1	.000	-5.866	-2.285
	[SLA=4]	-1.624	.533	9.301	1	.002	-2.668	-.580
	[SLA=5]	0 <sup>a</sup>	.	.	0	.	.	.

Link function: Logit.

a. This parameter is set to zero because it is redundant.

As illustrated in the table 1, there is a relationship between strategic learning alliance and organisational performance. Thus, the null hypothesis was rejected, and the alternative hypothesis accepted as  $p < 0.05$ . In a similar vein, results of Spearman's rho indicated a positive relationship between strategic learning alliance and organisational performance. In other words, correlational results were found to be statistically significant:  $n(192) = +.672$ ,  $p < .05$ , two-tailed. This suggests that the formation of strategic learning alliances provides an opportunity for better organisational performance.

For variables under learning alliances, SLA=1, SLA=2, SLA=3, SLA=4 and SLA=5, the reference point is set at SLA=5. This has an estimate value of zero. Considering this SLA=1 has an estimate value of - 5.210. This indicates that a lower cumulative score than the reference point is more likely. SLA=2 has an estimate value of -6.993, and this indicates that a lower cumulative score than the reference point is more likely. SLA=3 has an estimate value of - 4.075, which is less than the reference variable. This suggests that lower cumulative scores are more likely. SLA=4 has an estimate value of -1.624 which is lower than the reference point. This suggests that a lower cumulative score is more likely. For all the variables SLA=1, SLA=2, SLA=3, and SLA=4 the researcher found a statistically significant results as illustrated by p values of .000, .000, .000 and .002 respectively.

Subsequently, the researcher conducted Spearman correlation to have a deeper insight into the relationship between learning alliances and organisational performance. Results of Spearman correlation is illustrated in the table 2.

**Table 2: Results of Spearman correlation.**

		Learning Alliance	Organisational Performance
Spearman's rho Learning Alliance	Correlation Coefficient	1.000	.672**
	Sig. (2-tailed)	.	.000
	N	192	192
Organisational Performance	Correlation Coefficient	.672**	1.000
	Sig. (2-tailed)	.000	.
	N	192	192

\*\* . Correlation is significant at the 0.01 level (2-tailed).

As illustrated in the table 2, the relationship between learning alliance and organisational performance was found to be statistically significant: correlation coefficient = +.672,  $p < .05$ , two-tailed. This suggests a significant positive correlation between the learning alliance and organisational performance.

Therefore, results of both ordinal regression and Spearman correlation demonstrate that the formation of learning alliances has a positive impact on the performance of organisations in the food retail industry in Bangladesh. This result is consistent with the work of several researchers who are contended that forming a learning alliance results in enhanced organisational performance (Hamel, 1991; Crossan and Inkpen, 1995; Osland and Yaprak, 1995; Morrison and Mezentseff, 1997; Grant and Baden- Fuller 2004; Muthusamy and White 2005; Vuori and Okkonen, 2012).

Crossan and Inkpen (1995) point out that the ability to extract skills and knowledge through alliances may become vital to survival for an organisation. Further, creating strategic alliances to learn from a partner can be a more effective and faster method of acquiring specific knowledge (Osland and Yaprak, 1995). In a similar vein, Hamel (1991) proposed that collaboration might create an opportunity for one partner to adopt the skills of the other and thereby develop its position within and outside the alliance.

Morrison and Mezentseff (1997) are of the view that learning alliances are aimed at establishing a mutual relationship based on co-operation, and not competition. Therefore, the learning environment enables alliance partners to build a relationship which enhances the strategic fit between the companies for the long term and enhance organisational performance. In addition, partners that work together will eventually acquire new knowledge by learning from each other, thereby resulting in improved organisational performance (Grant and Baden- Fuller 2004; Muthusamy and White 2005).

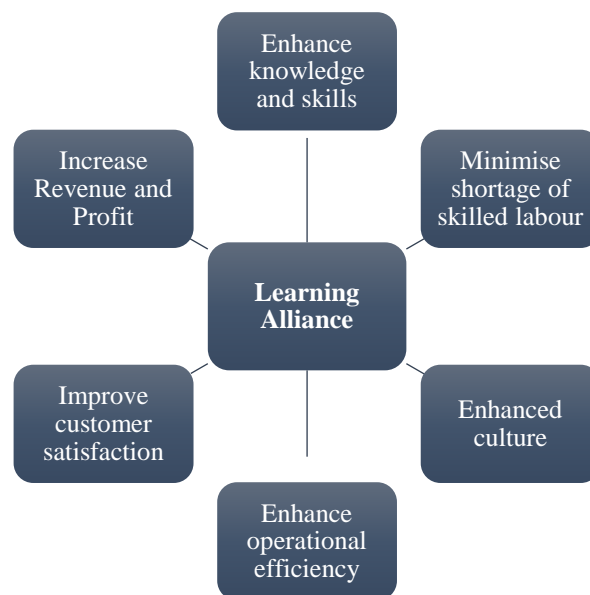
Through a learning alliance, a company has an opportunity to gain useful, relevant, and interesting knowledge that can be used to complete the puzzle of the company's competitive position and choices (Vuori and

Okkonen, 2012). In fact, the formation of a strategic learning alliance can enhance organisational performance by offering synergy effects (Zineldin and Dodourova, 2005; Kock *et al.*, 2010; Bigliardi *et al.*, 2011).

However, despite the synergy that strategic learning alliances provide, there may also be some difficulties relating to the individual competences of the associated organizations. The biggest risk and cost associated with the learning alliance are that partners can lose their sources of competitive advantage to their partners very rapidly if they are not careful (Lei and Slocum, 1991). In these circumstances, less-reliant partner may cause a threat to their alliance partner/s by becoming a powerful and direct competitor (Lei and Slocum, 1991). Further, Bengtsson *et al.* (2010) found a negative correlation between strategic learning alliances and organisational performance. According to Bengtsson *et al.*, (2010) the main risks associated with forming learning alliance seem to be knowledge spill-over and the resulting opportunistic behaviour of alliance partners.

The researcher also captured qualitative information to obtain a deeper understanding of how the formation of the learning alliance may impact organisational performance of the food retail industry in Bangladesh. The findings of this research illustrate that the formation of the learning alliance can enhance organisational performance in several ways as illustrated in figure 1.

**Figure 1: Enhancing organisational performance by forming learning alliance.**



**Source:** Author's Own Construction

Learning is defined as a process of gaining new insight and knowledge, leading to individuals modifying their actions and behaviour (Morrison and Mezentseff, 1997). Learning comprises the enhancement of awareness or insights that it encourages a transformation in states of knowledge that enlarges the range of latent behaviours (Huber, 1991). Individual learning converts to organizational learning when new knowledge is assigned to others within the organisation who could benefit from what has been learned (Hamel, 1991).

In order to survive in an increasingly dynamic and complex globalised business environment, companies must do more than just adapt (Luthans *et al.*, 1995). In fact, the future success of organizations depends on the ability to learn and create knowledge (Luthans *et al.*, 1995). Furthermore, Bronder and Pritzl (1992) have suggested that learning is becoming the principal tool for future competitiveness in strategic relationships. Thus, learning is a critical resource for business success, survival, and competitiveness.

However, the results of the study revealed that employees working in the food retail industry lack the required knowledge and skills to perform their tasks. In some cases, it was found that employees lack basic skills. Respondents reported that a lack of knowledge and skills presents obstacles for better performance, as illustrated below:

“...There is a pretty lack of knowledge in our labour. So, they don't have enough skills and knowledge.... there's a lack of basic skills...” (Maxwell, industry expert).

Previous studies also suggest that a shortage of skilled labour and experienced labour is a major challenge for the food retail industry in Bangladesh (Kamruzzaman *et al.*, 2006; Saleheen *et al.*, 2014; Hussain and Leishman, 2013). This indicates that a lack of required skills and knowledge among employees presents significant challenges for organisations in the food retail industry in Bangladesh.

Considering this, there is an urgent need for further training, as illustrated by the extract below:

“it will always increase your training cost so when you have lack of basic skills of workers and you have to train your worker more to retain them” (Maxwell, industry expert).

Furthermore, lack of skills among employees results in poor quality work, which is detrimental to organisations in the wake of growing global competition. Further, a lack of skills affects customers' satisfaction and damages the reputation of respective organisations. This results in a loss of customers and revenues, as illustrated below:

“...Such as unskilled employees often perform poor quality work and an organisation has to bear cost of poor work. This also results wastage of time. Moreover, unskilled labour often results lower customer satisfaction and damage company reputation. This can be cause of losing customer and loss of revenue...” (Neil, industry expert).

“...it causes lower productivity and lower quality of work. Overall, it increases the cost of organisations significantly...” (Scott, industry expert).

Similarly, previous studies found that unskilled labour often causes poor quality work, increased costs, lower productivity and negatively affects customer satisfaction (Cubas, Ravikumar and Ventura, 2016; Peri, 2016). This is a cause for concern within the context of the food retail industry in Bangladesh. Therefore, it is imperative that organisations form learning alliances with the intention of sharing knowledge and skills as illustrated below:

“...learning alliance actually, it's about sharing their knowledge to increase the competition advantages.... The primary objective of creating learning alliance is to learn from each other or share the knowledge...” (Foster, industry expert).

“...Basically, learning alliance are created to gain more knowledge and skills. So, sharing knowledge, it will bring you more knowledge in your company...” (Maxwell, industry expert).

This illustrates that a learning alliance is a partnership between organisations to enhance knowledge and skills of employees working in respective organisations due to achieve shared goals.

There are two distinct interpretations of strategic learning alliances. The first is that advanced by Hamel (1991), and often termed as ‘the race to learn’ that signifies alliances as ‘mechanisms of gaining access to partners’ skills and knowledge (Inkpen and Beamish, 1997). The second addresses the opportunities for co-specialization and improvement of competencies that develop from new business opportunities generated by the advantage of the combination of partner capabilities (Phan and Peridis, 2000). Hence, a learning alliance is a strategic approach to enhance the learning of employees within the organisation through the right partnership to achieve common goals. It is important to highlight the aspect of sharing within learning alliances, as illustrated below:

“...learning alliance helps or involves knowledge sharing...” (Kevin, company director).

“...Obviously by knowledge sharing, as I said earlier, um, if, uh, if learning alliance can help each other, sharing their knowledge, so another one company of the company gain more knowledge into their company...” (Maxwell, industry expert).

This illustrates that learning alliance can create an opportunity for unskilled or semi-skilled employees of organisations to work with skilled employees of alliance partner and enhance their knowledge and skills.

Consistent with these findings, Inkpen and Beamish (1997) suggest that a learning alliance is a mechanism of gaining access to partners’ skills and knowledge. What’s more, creating strategic alliances to learn from a partner can be a more effective and faster method of acquiring specific knowledge (Osland and Yaprak, 1995). Hence, learning is an active process and if any organisation in the food retail industry creates a learning alliance, it involves sharing and adopting the knowledge and skills between employees. Further, it can create an opportunity for employees of associated organisations in the industry who are either unskilled or semiskilled or who have less knowledge to perform their duties to work with skilled employees and thereby enhance their knowledge and skills.

In addition to prevailing empirical works, this study demonstrates that a learning alliance involve educating and training employees of respective organisations in the food retail industry with the intention of reducing the knowledge gap, as illustrated below:

“...It will limit your skill gap. So, when you train your gain knowledge, quality, and if you train them. So, there's a skill gap you had before, you wouldn't have it...” (Maxwell, industry expert).

In addition, training enables employees of the associated organisations in the food retail industry in Bangladesh to make better and faster decisions, as illustrated below:

“...They can educate, they can train their employees which enables better and faster decision making...” (Foster, industry expert).

Hence, forming a learning alliance involves educating and training employees. This helps to reduce knowledge gaps among employees. Further, this provides an opportunity for employees to make better decisions timeously.

Furthermore, a learning alliance can help employees to feel valued and recognised. This can motivate them to perform better for the company, as illustrated by the extract below:

“...It will help your employees to feel valued and if the customer feels valued, they will be um, apply their knowledge to their company and they will get, take the pride of your company. So, you will feel them valued and they will work as hard as you wanted...” (Maxwell, industry expert).

Similarly, North and Kumta (2018) suggest that making a collaboration for the purpose of learning from each other can make individuals, teams and entire organisations feel valued. Further, forming a learning alliance involves sharing the knowledge that can motivate employees to perform at their optimal level (Dong, Bartol, Zhang and Li, 2017). Hence, forming a learning alliance can be a strategic resource for organisations in the food retail industry in Bangladesh.

In addition, forming learning alliances has the potential to increase job satisfaction among employees, as illustrated below:

“...Creating an environment where knowledge sharing is encouraged helps individuals feel valued and that will eventually increase job satisfaction...” (Scott, industry expert).

Chin (2018) suggests that job satisfaction helps respective organisations to minimise turnover rate. In addition to the existing empirical works, this study illustrates that forming a learning alliance can create the

opportunity for organisations in the food retail industry in Bangladesh to access top talents and take advantage of existing experience and expertise, as illustrated below:

“...Learning alliance can also assist an organisation in getting top talent access and to take advantage of existing experiences and expertise...” (Neil, industry expert).

In addition to the prevailing empirical work, this study suggests that the formation of a learning alliance helps employees to understand the market situation of the food retail industry and understand consumers' behaviour. This is as illustrated below:

“...Obviously, it helps in understanding markets and customers, what is the current market situation and what is that our consumption behaviour...” (Foster, industry expert).

What's more, obtaining understanding of the market situation and consumer behaviour helps organisations to achieve desired goals, as illustrated below:

“...So, if you know the markets and if you know your customer, what they want, it will help you in your organization to achieve your goal, whatever goal you are setting or whatever strategies you are setting...” (Maxwell, industry expert).

“...sharing knowledge increases the productivity of team members. They can work faster and smarter...” (Scott, industry expert).

This indicates that sharing knowledge by forming the learning alliance enhances the productivity of associated organisations and enable them to perform faster and smarter. Overall, this enhances effectiveness of employees. Further, this has a positive impact on the operational efficiency of associated organisations, as illustrated below:

“...efficiency can be increased by sharing knowledge...” (Paula, company director).

“...And, it also enhance operational efficiency that's perhaps the most important thing. Sharing knowledge increase the productivity of employees. It increases their employees' effectiveness, efficiency and their productivity...” (Foster, industry expert).

Scholars suggest that sharing knowledge can enhance employees' productivity, effectiveness and efficiency of respective organisations (Bollinger and Smith, 2001; Wang and Wang, 2012). Jan Van Ree (2002) defined productivity, effectiveness and efficiency as key performance criteria and therefore sharing knowledge has a positive impact on performance of respective organisations in the food retail industry in Bangladesh. Furthermore, the formation of a learning alliance ensures same level of knowledge and understanding among employees and this helps to reduce conflict, as illustrated below:

“...Like, if everybody has the same level of understanding, knowledge, if they know what the doing and that will minimize the conflict among the colleagues...” (Michael, company director).

Blomqvist and Levy (2006) suggest that creating a collaborative agreement for the purpose of knowledge sharing can assist accompanying organisations to reduce conflicts among employees. Similarly, Sinclair (1993) points out that reducing conflict among employees is an imperative approach to improve organisational culture. Enhanced organisational culture often leads to enhanced organisational performance (Kim and Yu, 2004). Hence, a learning alliance presents an opportunity for enhanced performance within the food retail industry. In addition, a learning alliance creates an opportunity for associated organisations to share learning material. This also enables employees to acquire skills and knowledge that will be of importance to deliver customer service. This is illustrated below:

“...We use the same training manuals, same training stuff which is cost effective as well for us. So, my staff learned a lot, they can provide great service to customers...” (Steven, company director).

This notion corresponds with the work of Zamir et al. (2014) who share the view that the collaborative agreement involves resource sharing, and this assists respective organisations to minimise associated costs. In addition to the previous empirical work, this study illustrates that providing enhanced service to consumers is an increasingly important issue in the food retail industry in Bangladesh, especially to the younger generation. Hence, organisations in the industry can attract more customers and generate greater revenue by providing greater customer service. Therefore, the formation of strategic learning alliances creates an opportunity for the associated organisations to generate greater revenue by enhancing employees' learning and offering enhanced service to consumers. This is reinforced by the extract below:

“...Working with other company which helped me a lot and your knowledge and skills are really matter to customer in now a day in Bangladesh. Especially, the younger generation do like to talk with the people in the shop where old generation used to be used to come in and just get their stuff and get out of the shop. But, well the young generation, they like to talk, they like people, knowledgeable people and all these. So, it did help me a lot...” (Steven, company director).

Hence, most of the employees within the food retail industry in Bangladesh are either unskilled or semi-skilled and many of them don't even have a formal education. Therefore, they have significant knowledge gaps and lack basic skills. This often causes poor quality work and an organisation must bear the cost of poor work. Moreover, unskilled labour often results in lower customer satisfaction and damages the company reputation. Consequently, this leads to a loss of customers and revenue.

## CONCLUSIONS AND MANAGERIAL IMPLICATIONS

It is apparent from the research findings that learning alliances will enable and encourage the sharing of skills as well as adapting knowledge among employees in the industry. In fact, a learning alliance creates opportunities for unskilled or semi-skilled employees to work with skilled employees and enhance their knowledge and skills. This enables them to perform more effectively and efficiently. Further, this enhancement of knowledge and skills can minimise a shortage of skilled labour. Hence, organisations in the food retail industry in Bangladesh should create learning alliances to improve their performance.

This study contributes to the academic debate of strategic alliance by drawing insights for Bangladesh's food retail industry. What's more, it is hoped that this research will attach a global dimension to an area that is under-researched. Insights from this study can be used by managers as a resource upon which to enhance performance and compete more effectively.

Finally, whilst the current study focused on how learning alliances can enhance organisational performance of the food retail industry in Bangladesh, future studies can consider how such alliance can enhance organisational performance of other industries in Bangladesh.

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# THE MECHANISM OF CORPORATE SOCIAL RESPONSIBILITY AND JOB CHOICE INTENTIONS

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## ABSTRACT

*This paper reviews the underlying mechanism of job choice intentions in relation to corporate social responsibility practices. The authors offer a multilevel theoretical framework that synthesises and integrates the underlying mechanism of individual's reactions to corporate social responsibility whilst pursuing employment opportunities. The reactive predictors of CSR actions are grouped into three main streams; the identity based view (i.e. individual centric), the signal based view (i.e. organisation centric), and the exchange based view (i.e. 'other' centric). The paper also delivers a graphical representation of these predictors and illustrates how CSR exerts influence over individual reactions to such practices. The managerial and theoretical implications are discussed in the context of CSR research.*

**Keywords:** Corporate social responsibility, Recruitment, Job search behaviour, Job choice intention, Organisational behavior.

## INTRODUCTION

Corporate Social Responsibility (CSR) has attracted worldwide attention amongst researchers. The topic became more popular about six decades ago (Bowen, 1953; Carroll, 1979; Greening & Turban, 2000; Backhaus et. al, 2002). CSR has been studied in various contexts to examine how its attributes can exert influence over management approaches (Aguinis and Glavas, 2012; Campbell, 2007); sales and marketing strategies (Vlachos et al., 2009); sociology, strategy, law (Rupp, Williams, &Aguilera, 2011; Aguinis, 2011) and human resources (e.g. Greening & Turban, 2000; Joo et al., 2016). CSR in human resources in particular has become a particularly popular research topic over recent years, predominantly in western cultural contexts. The vast majority of research considers CSR as it relates to economic performance (Aguinis & Glavas, 2012; Rupp, Williams, &Aguilera, 2011).

However, little attention has been given to the influence CSR exerts over potential employees. There is also very little known about the underlying mechanism of potential employee reactions to CSR. Some studies have attempted to explore underlying mechanism between job search behaviour and CSR (e.g. Wang, 2013; Lin and Chen, 2015; Dawkins et al., 2016; Schemken & Berghaus, 2018). However, these studies lack offering anything like a robust explanation to the reason behind such reactions to reactive CSR actions. Therefore, this paper posits that the CSR literature needs to be further investigated in the light of such underlying mechanisms to explore potential employee reactions to CSR, and subsequent job choice intentions. In addition, a theoretical framework is developed to understand the reactive predictors of CSR practices at the micro level of analysis.

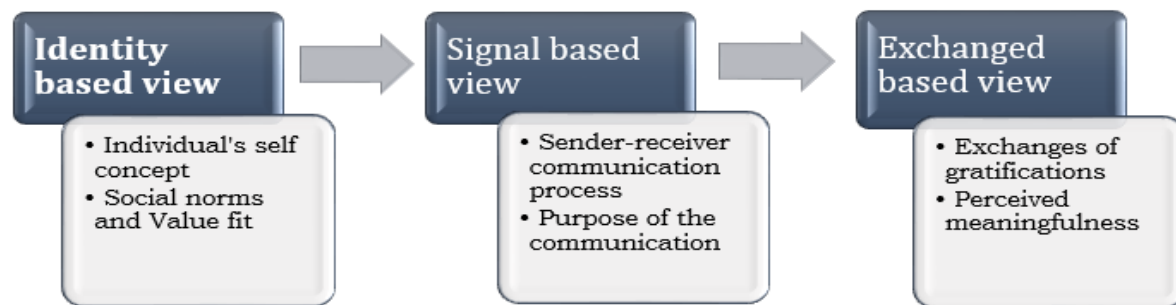
## CONTEXTUALISATION AND THEORETICAL BACKGROUND

Research into CSR dates back to at least the 1930s (Glavas & Kelley, 2014), however, the idea of giving back to society through activities was identified as far back as 5000 B.C. (Anderson, 1989). Over time, CSR activity has been considered an increasingly moral thing to do (Luce et al., 2001). Some believe CSR is a business necessity to leverage

organisational growth as well as to meet the expectations of society (Bowen, 1953). As the concept gains prominence amongst researchers worldwide, a commonly accepted definition remains elusive despite the existence of a range of definitions. While a universal definition of CSR may not be feasible, contextualised definitions must, at the very least be arrived at in a way that refers to specific situations and scenarios. The authors take the view of Jakaria & Ozuem, (2018) that CSR can be defined as an independent value construct for stakeholders that are achieved through the specific actions of firms under the generic label of societal well-being.

On the other hand, academic debate about how to conceptualise the relationship between CSR and job search behaviour has developed extensively since the 1990s. In the context of this paper, CSR is considered an effective recruitment tool (Turban and Greening (1997) as job applicants are likely to search for and evaluate organisations based on their CSR activities (Backhaus et al., 2002). In other words, attracting qualified employees can be linked to the organisation's reactive and proactive CSR engagement (Jones et al., 2016). However, the extent to which CSR motivates prospective employees in terms of their job choice intentions has received very little attention. Even less interest has been shown in the underlying mechanism between these two constructs which therefore merit further investigation.

Thus, this paper analyses past literature in this field and presents a theoretical framework to understand the underlying mechanism that influences the relationship between CSR and job choice intentions. The study reveals that knowledge in this field is mainly based on the following theories; signaling theory, social identity theory, the theory of planned behaviour, person organisation fit theory, expectancy theory and policy capturing based mechanism theory. This study emphasises that the exploring mechanism between CSR and job search behaviour literature can be grouped into three streams: First, the identity based view (i.e. individual centric), second, the signal based view (i.e. organisation centric), and third, the exchange based view (i.e. other centric).



**Figure 1: Underlying mechanism of CSR and job search behavior.**

## Identity Based View

The most frequently used mechanism to explain CSR reactions at the micro level is based on individual identification theory. Based on the extant studies above, some commonly used theories in this regard are social identity theory, person-organisation fit theory and the theory of planned behaviour. According to social identity theory (Tajfel and Turner, 1985) an individual's self-concept is exposed based on their perceived membership of a social group they belong to. An individual identifies with an organisation if they perceive it is highly prestigious and if it has a positive and attractive image. This can leverage a person's self-esteem. The more that outsiders appreciate their social group the more they tend to feel a sense of pride and affiliation with the group (De Roeck & Delobbe, 2012).

Furthermore, individual's seek to join the high status organisation to develop and maintain favourable self-worth, and they expect that membership of a particular organisation will create a sense of self pride (Gond et al., 2017). Social identity theory explains how individuals classify themselves into social categories, and part of their self-concept relies on the social group they belong to. This happens while individuals consider themselves, and others as belonging to different social categories. For instance, Dutton and Dukerich (1991) found that CSR influences corporate image, and this perception can impact on employees by fostering their self-worth, self-enhancement, organisational

pride and identification (Farooq et al., 2017). Such ideas speak to the question surrounding when and how people behave as part of a particular social group, and how they identify with such groups.

Accordingly, job applicants are attracted to organisations that fit their own values and norms, and their perception of CSR is positively associated with employer identification (Albinger and Freeman, 2000). Although social identity theory has been used extensively as a conceptual framework in micro level analyses of CSR, only a few such analyses have been able to test whether identifications result in any kind of tangible outcome (e.g., Farooq et al., 2017; De Roeck et al., 2016). For example, studies found that perceived levels of prestige and perceived respect can influence organisational identification (Farooq et al., 2017) and increase trust in the company (De Roeck & Delobbe, 2012).

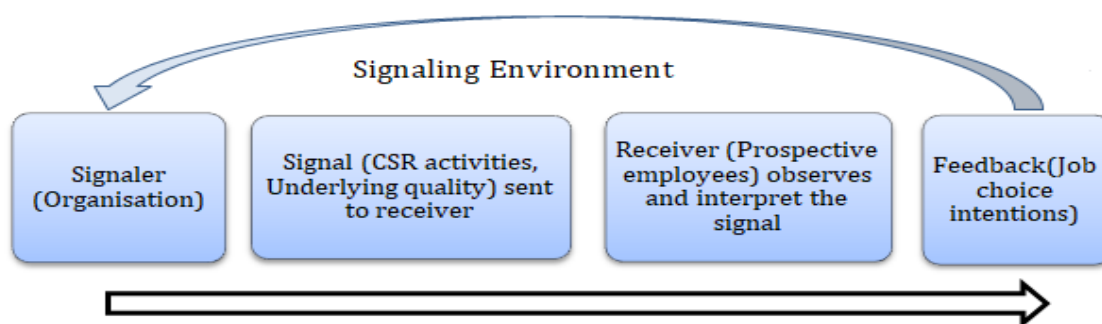
The second most salient theory used to articulate identity-based mechanisms is the person organisation fit theory. The concept of PO-fit theory has been extensively utilised to investigate how prospective employees are attracted to a particular employee. In person organisation relationships, the starting point can be called 'organisational entry'. Wanous (1992) identified four stages of organisational entry as recruitment, selection, orientation and socialisation. The term recruitment refers to a process of mutual attraction, whereas selection refers to a mutual choice. The last two terms, orientation and socialisation refer to an on-going process that takes a long time to achieve in terms of person-organisation fit (Kan, 2013). In terms of job searches, the person-organisation fit theory goes beyond traditional employment benefits and explores how employees see the organisation as an extension of him- or herself (Simpson and Aprim, 2018). The perceived orientation of an individual's goals and values is therefore related to that of the organisation.

However, there is a general tendency of individuals to be more attracted to decentralised organisations and the idea of reward based performance (Kan, 2013). The Theory of Planned Behaviour (TPB) argues that an individual intention to engage in a behaviour is the main predictor of such behaviour where intentions derive from specific attitudes towards that behaviour. Many studies of CSR and job choice intentions have used TPP to predict job search behaviour (Van Hooft et al., 2006; Dawkins et al., 2016). There is agreement that job choice intention is the main determinant of job search behaviour.

## **Signal Based View**

The second underlying mechanism used to explain CSR at the micro level is based on signalling communication. Signalling theory (Spence, 1974) has been identified as the second most popular choice amongst researchers to investigate the relationship between CSR and job search behaviour. The theory deals with sender-receiver communication processes, whereby one party, the sender, must choose how to convey (or signal) particular information, and the other party, the receiver must choose how to interpret the signal (Spence, 1974). In addition, the theory posits that market actors (i.e. Job applicants) rely on indicators or signals provided to understand what experiences to expect if they were to work for a particular organisation (Gond et al., 2017). In this case, the organisation exerts information (the signal) both implicitly and explicitly to influence potential employees to draw conclusions about the company's activities (Srivasta and Lurie, 2001). Signals can be given off in relation to the possible working environment for example (Turban and Greening, 1997).

In relation to CSR, Greening and Turban (2000) argue that CSR provides a signal to potential applicants about the organisation's values and norms. The more the organisation displays a positive image, the more likely they are to signal something attractive to potential employees (Rynes and Cable, 2003). Therefore, CSR can act as a relevant signal to future employees to infer their likely treatment from the organisation. By using signaling theory, the figure below shows the underlying mechanism of CSR reactions between the organisation and prospective employees.



**Figure 2: CSR signaling mechanism.**

The above figure illustrates the signaling mechanism of CSR in relations to organisational attractiveness. The mechanism includes the two major actors (i.e. signaller, receiver) involved in a communication paradigm to exchange signals. The signal can be multifaceted and comes from different entities within a firm. The author circumvents these issues here to explain the concept in the simplest manner by focusing on a single signal (i.e. CSR) that is communicated between the organisation (i.e. signaller) and prospective employees (i.e. receiver). This is consistent with the original approach of the theory that was developed to build one-to-one or transaction-specific communication (Connelly et al. 2011).

Nonetheless, despite widespread use of signalling theory on the basis of the argument that CSR works as a signal to potential employees, the consequent evaluation of whether this underlying mechanism is influential remains largely unknown. A few studies (see for example, Behrend et al., 2009; Jones et al., 2016) have recently attempted to investigate the mediation process of how signaling functions in relation to the CSR appeal to prospective employees. Jones et al (2016) identified and tested how job applicants were affected by three signaling mechanisms (i.e. anticipation of pride and prestige, perception of value fit, and expected treatment) that articulated the organisation's CSR activities. However, the intuitive nature of signalling theory demands a more sophisticated investigation to explain how CSR activities influence the job applicants through signaling mechanisms.

## Exchange based view

The third underlying mechanism behind the individual's reaction to the CSR is based on the exchanges of gratification. One of the key theories used in this field is expectancy theory (e.g. Lin et al., 2012; Wang, 2013). The theory suggests that the job seeking process is based on future career expectations (Lin et al., 2012). Individuals can perform an activity if they believe there is a positive correlation between efforts and performance, such as perusing job alternatives while perceiving positive career expectations (Greening and Turban, 2000). These findings largely question the generalisability of job choice intentions based on expectancy theory. Subsequently, El Akremi et al., (2015) pointed out that CSR involves extra-role corporate activities that benefit other stakeholders. Therefore, its evaluation by individuals may alter the dynamics of social exchange within the organisation. By doing so, CSR enhances trust and perceived organisational support by increasing the norms of reciprocity between employees and employers.

Moreover, shaping employees' psychological needs can also explain the individual's reaction to CSR. Aguinis and Glavas (2013) argued that CSR shapes the meaning of employee working experiences. Jones and Rupp (2016) later observed that CSR influences individual reactions by distinguishing care, self, and relationship based mechanisms which address multiple individual needs. These can be further explained from an examination of the 'meaningfulness' literature which suggests different organisational members care about different issues (Aguinis and Glavas, 2013). As regards work-based meaningfulness, there are three kinds of orientation that individuals can discover in the workplace (Wrzesniewski, 2003). The first is based on material benefits and job security such as salary, the second is based on career orientation such as advancement and promotion. The third is based on the idea that work is considered an effort to make the world a better place. Aguinis and Glavas (2013) point out that the calling orientation of meaningfulness is linked to CSR. However, the researcher argues that all three forms of meaningfulness can be linked to CSR. An example of material benefits might be a pure exchange based mechanism whereby individuals perform activities in exchange for money.

## MANAGERIAL IMPLICATIONS AND CONCLUSION

The notion of CSR pertains to social activities that benefit a range of stakeholders (Joo et al., 2016). CSR influences both external stakeholders and internal stakeholders, such as potential employees (Kan, 2013; Dawkins et al., 2016). CSR practices can be crucial factors in attracting and retaining talent in a tight labour market (Vaiman et al., 2012). As, Backhaus et al. (2002) argue, job applicants are likely to search for and evaluate organisational features based on the CSR activities that they are presented with. Thus, proactive CSR engagement can be useful for attracting talent (Jones et al., 2016). Accordingly, Turban and Greening (1997) consider CSR as an effective recruitment tool. Thus, a new school of thought has been developed that advocates that a firm's social responsibility initiatives can leverage attractiveness amongst potential employees.

However, the extent to which CSR is attractive to prospective employees warrants further investigation. In this process, the underlying mechanism behind the individual's reaction to CSR needs to be explored. There is evidence to suggest that organisations that showcase their CSR activities on recruitment websites gain the attention of prospective employees, but there has been no systematic analysis of these trends that can be rationalised. This study is the first to suggest that the underlying mechanism of CSR and job search behaviour literature can be viewed into three systematic streams, specifically the identity based view, the signal based view and the exchange based view. This finding could be significant for future researchers to systematically understand the reactive mechanism of CSR practices that influences the job choice intentions. In so doing, researchers and practitioners can benefit from having greater control over understanding how prospective employees can react to the CSR practices of an organisation. Such research could enhance our understanding of how to recruit and retain human capital, as well as how to utilise CSR communication that is fit for purpose.

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# EXTRACTING THE EMERGING TECHNOLOGIES FOR POTENTIAL USERS: EVALUATION OF SATISFACTION AND SUITABILITY

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## ABSTRACT

*The emergence of new technologies brings social and economic benefits to mankind. In particular, the usefulness of technology derived from radical innovation results is greater than with gradual technology development. Therefore, many of the existing studies have attempted to explore the usefulness of emerging technologies. However, these utilizations tended to be evaluated in terms of only the performance of applications, thus potential users' expectations such as the satisfaction and suitability for utilizations are not mainly used for evaluating process. The purpose of this study is exploring the emerging technologies by measuring the satisfactions and suitability of utilizations in future possible issues. To do this, we gathered the user's expectations of emerging technologies and their utilizations from online forums and blogs. Then, we constructed the sentiment and function dictionaries to analyze the preference and initial discrepancy of opinions. Lastly, we evaluated the utilizations of technologies through two evaluation factors 1) Satisfaction that is estimated the user's opinion by sentiment analysis 2) Suitability that is estimated the level of "difficulty" and "scope" for usage the technologies by consensus and diversity index. For the purpose of conducting empirical study, we selected the field of food processing technologies that is one of emerging comprehensive technology fields with a diverse range of technological activities. This study can contribute to provide the directions for identifying the emerging technologies by consensus and sentiment analysis, which can reflect the future-oriented expectations of potential users.*

**Keywords:** Utilizations of emerging technology, Potential users, Consensus index, Diversity index, Sentiment analysis.

## INTRODUCTION

With the Fourth Industrial Revolution, there are numerous unintended developments which can induce the emergence of new technologies. The novelty of these technologies can bring social and economic benefits to mankind in various fields (Jin & Von Zedtwitz, 2008). In particular, these technologies have promoted the radically novel and rapid changes had a tremendous impact on social and technological development, so the usefulness of technology derived from radical innovation results is greater than with gradual technology development (Rotolo et al., 2015). However, they tended to be difficult to define the constraints, functions, and capabilities (Stahl et al., 2011). In addition, their utilization and outcomes are difficult to clearly estimate for potential users due to their characteristics are changed and modified in a state of flux (Stirling, 2007). Thus, there are many cases in which the functions/fields of the utilization changes in the utilization stage after development.

In this situation, many studies have attempted to evaluate the usefulness of emerging technologies to select the key growth power. Although these technologies utilized for solving social problems by potential users, emerging technologies tended to be evaluated by only the viewpoint of developers such as the performance of applications. In

addition, many studies only utilized past time-series data to estimate the technological progress in the future (Daim et al., 2006; Tran & Smith, 2018; Atuonwu, 2018).

Therefore, it is needed to evaluate the potential users' expectations such as the satisfaction and suitability for emerging technologies. In response, we developed a framework to evaluate the emerging technologies: whether these utilizations will be preferred and suitable for potential issues in the future. To overcome the limitations of previous research, we utilized 1) Online posts from online forums as new data and 2) Consensus index, Diversity index and Sentiment analysis as a tool for evaluating the potential users' expectations.

In online forums and blogs, potential users discussed the rapid changes and trends in social behavior (Cachia et al., 2007). Moreover, the evaluation and improvement opinion are provided through frankly textual reviews from anonymous users (Duan et al., 2008). They can discuss through interaction and communication, so their textual posts could provide rapid changes and trends in social behavior (Chachia et al. 2007). Thus, these posts could contain the textual expectation and evaluation of emerging technologies. In addition, their posts also mainly contained information on the latest progress and applications from a large amount of participation and collaboration (Weigand, 2014).

In addition, we introduced three indices to evaluate the utilization of emerging technologies. First, we estimated the preference of utilization by sentiment analysis. Sentiment analysis automatically extracted the preference scores from unstructured textual collections (Duan et al., 2008). Almost every textual post is unrevealed their opinion, so this analysis can show the opinion of potential users as a score. Second, we estimated the level of scope and difficulty for usage as suitability. Most potential users expected different usage for emerging technologies, so the conflict level of their opinions should define. To cover this, we calculate the Consensus and Diversity index to identify 1) the variety and 2) cognitive differences between the online posts (Stirling, 2007; Cook, 2006). These two indices widely used to show the distribution of the satisfaction of potential users. They increased when the actors had 1) various types and 2) a large discrepancy of the objects (Parreiras et al., 2010). Thus, we could evaluate the utilization whether they are 1) widely used to potential issues and 2) difficult to apply to potential issues.

This study is organized as follows. Section 2 reviews previous research regarding emerging technologies and their evaluation. Section 3 proposes the framework through which the emerging technologies were identified: through Satisfaction by sentiment analysis and Suitability by the consensus index and diversity index. Section 4 presents a case study based on the proposed framework. Finally, Section 5 deals with several contributions, limitations and suggestions for future research directions.

## LITERATURE REVIEW

### Theoretical Background: Emerging technologies

According to several previous studies, the definition of emerging technologies was radical progress technologies with non-specific configurations and high potential (Boon & Moors, 2008; Srinivasan 2008; Cozzons et al., 2010). Based on these definitions, these technologies have three characteristics: 1) beneficial to a wide range of society, 2) growing quickly due to the science-based knowledge, and 3) uncertain and ambiguous (Rotolo, 2015). Especially, the capabilities and form of emerging technologies are changeable, so the usage of technologies can shift the other direction that is unintended (Stirling, 2007). These characteristics led to having difficulty to estimate how to use the emerging technologies, so it is difficult to forecast whether technologies can progress and usefully utilize for society.

To identify emerging technologies, there have been some related studies on evaluating emerging technologies. Many studies utilized patent and paper data that could be easily accessed online. Previous studies analyzed the emerging technologies through bibliometric analysis and network citation analysis that could reflect the characteristics of technologies. In this research, many researchers tended to measure various indicators such as the frequency of keywords (Guo et al., 2011), the number of paper/patent (Daim et al., 2006) and citation network indices (Kim et al., 2014; Érdi et al., 2013). However, these data only contained the viewpoint of experts who are only a small minority of potential users. In addition, many studies only focused on the technological progress of emerging technologies. Many studies tended to estimate the quantitative growth of technologies such as the number of subjects (Ogawa et al.,

2018), the number of article and papers (Joung & Kim, 2017; and the likelihood of progress (Ma et al., 2015). These criteria could connote only the performance of technologies, not the evaluation from society. These studies are commonly inadequate for considering the quality, feedback, and preference of emerging technologies in the future.

Compared to these previous studies, we focused on “potential users” who are a majority of utilizing the emerging technologies. In particular, we focused on not technological progress, but the usage of technologies that is the most important factors for users.

## Methodological Background

In this study, satisfaction means how much the utilizations are favorable for potential users. One of the proper methodologies is sentiment analysis. Sentiment analysis is the automatic analysis of evaluating the textual document and estimating the opinion through subjective texts stated in online textual content such as online posts and reviews (Das and Chen 2001). This analysis was widely used to distinguish the positive and negative documents, thus classify the polarity of the document by conducting analysis (Pang et al. 2003). However, many studies conducted this analysis to calculate the strength of sentiment through sentiment score from subjective natural words or clauses at both the word and document level (Thelwell et al. 2010). Due to its easy applicability, numerous previous studies have conducted a sentiment analysis to identify customer opinions in online reviews (Wang et al. 2011; Qu et al. 2009). This study also conducts the sentiment analysis to construct quantitative data (sentiment score) from textual evaluation in online posts. In this study, sentiment scores will then serve as a proxy for the textual evaluations of potential users.

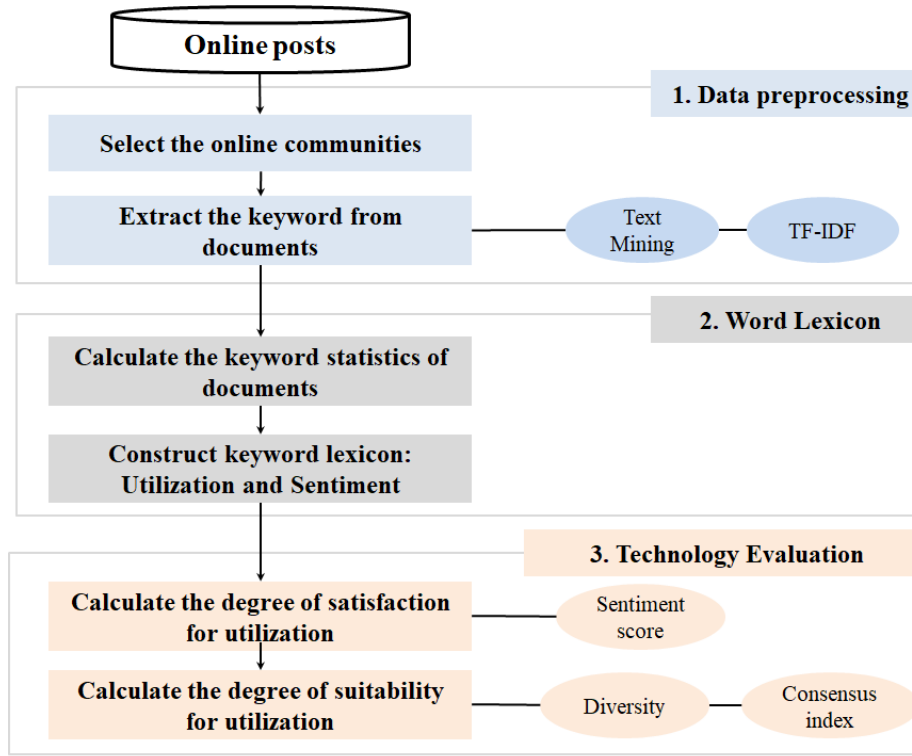
To evaluate the suitability, this study used two methodologies: consensus index, and diversity index. Consensus index is one of the methods for measuring the degree of agreement between members (Day and McMorris, 1985). This index calculated the level of conflict based on two criteria: 1) whether the preference coincides with other members or not, and 2) physical and cognitive differences in preferences (Cook, 2006; Xu et al. 2013). Among many types of indices, Cook (2006) proposed a distance-based consensus index that showed the disparity of the preference. This index tended to increase when the members had 1) various types and 2) a large discrepancy of the objects (Parreiras et al., 2010). This index could reflect the voter power and preference strength, so many previous studies utilized this index to many decision-making processes (Chen & Chung, 2010; Kruger & Kearney, 2008; Morais & Almeida, 2010). This study also can introduce the distance consensus index to identify the disparity of utilization.

A diversity index is measuring how elements included various characteristics in a group. This index was presented as the inner product of the proportion of elements and cognitive distance (Stirling, 2007). Therefore, the index is determined by how many kinds of elements are and how much different the elements are. This index applied to identify the emerging technologies in terms of technological improvement through citations of patents and paper. For instance, the potential of technologies is estimated by variety (the number of categories cited) and balance (the distribution of citations among categories) (Rotolo et al. 2017; Rijnsoever & Frank, 2015). According to previous studies, technologies with high diversity have more potential to progress. In the collaboration process, technology with high diversity can improve without difficulty, for steadily information exchanges with other fields could promote the progress (Rijnsoever & Frank, 2015). With them, these technologies could maintain a resource pool, and increase resilience and flexibility (Rosenberg, 1996). In this study, therefore, diversity index will then serve as a proxy for the potential of improvement and expansion of utilization.

## RESEARCH FRAMEWORK

This study was largely composed of three steps. The first step involved data collection and preprocessing. We selected several online communities that can discuss emerging technologies and their applications with potential users. Then, we collected the posts from communities and extracted keywords from the posts. The second step was a stage in which word lexicons construction. To construct the two lexicons: utilization and sentiment, we identified the list and sentiment strength of each keyword. The last step was the evaluation of emerging technologies. To do so, we calculate satisfaction and suitability to identify which technologies would have proper utilization by using several indices. Figure 1 describes the overall process of this study.

Figure 1: Overall Process of Research Framework.



## Step 1: Data Gathering and Keyword Extraction

The first step was data collection and preprocessing. To evaluate the expectation of utilizations, this study collected the posts of potential users from various online forums and blogs. There are many types of online forums, so we selected several forums that intensively interacted about the selected fields of technologies in the future.

The next step involved a data preprocessing to identify what keywords were extracted in each post. In particular, the collected posts rarely contain structured data such as numerical and statistical information. Thus, to conduct the quantitative methodology, the overall frequency of words was calculated. To identify the keyword which connoted 1) the utilization and their related fields of technologies or 2) the emotions of potential users by conducting text-mining techniques. Following the elimination of unrelated or meaningless keywords, they were extracted from the gathered database. If the selected keywords were observed more than a pre-determined threshold, we classified these keywords as interested keywords. After that, we quantified selected interested keywords through Inverse Document Frequency (TF-IDF) (Ramos, 2003). This reflects that how important collected keywords are to a document in data collection (Salton and McGill 1983). This statistic could be calculated by multiplying the inverse fractions of the documents that contain the words and the proportion of selected keywords. Formula (1) shows how to calculate TF-IDF. If a keyword observed less than the threshold of TF-IDF in the document collections, this keyword passed over the next process.

$$tf-idf(f, D, t) = \left( \frac{f_{t,d}}{\max[f_{t,d}]} \right) \ln \left( 1 + \frac{N}{n_t} \right) \quad (1)$$

$N$ : Total number of documents

$n_t$ : The number of documents which contain word  $t$

$f_{t,d}$ : The frequency of word  $t$  in document  $d$ .

## Step 2: Word lexicon construction

Before conducting analysis to measure the expectation in textual posts, we should define the keyword lexicon for 1) utilization and 2) sentiment. First, the utilization keywords are identified whether 1) different posts are detected in different forums and blogs and 2) similar utilization are detected in different posts. If several words connected similar utilization, these words are considered as the same utilization (label). If the same words could be mentioned for several utilizations, the weight of words is identified based on the co-occurrence of other related utilization words. Second, we divided the sentiment keywords into three groups: positive, negative and neutral through SentiWordNet (Baccianella et al., 2010). Each keyword involved the score depending on the context of the word.

We also converted the collected posts into Keyword vectors, which involved information related to the frequency of occurrence and the list of keywords. A keyword vector is one of the general forms for analyzing large amounts of unstructured textual data (Yoon & Park, 2004). In a keyword vector, each row corresponds to each post, and each column corresponds to each keyword in the pre-defined word dictionary. In below figure, which showed the example of keyword vectors, the component of vectors meant the occurrence of a keyword in each document. Through keyword vector, we can identify that 1) how satisfied potential users with the utilization of emerging technologies and 2) how many utilizations of emerging technologies appeared in each post.

Figure 2: The example of keyword vectors.

	Keyword 1	Keyword 2	Keyword 3	...	Keyword $k-1$	Keyword $k$
Document 1	0	1	2	...	0	1
Document 2	0	0	1	...	0	1
Document 3	1	0	0	...	3	1
Document 4	0	0	0	...	2	0
...	...	...	...	...	...	...
Document $n-1$	0	0	0	...	0	0
Document $n$	0	2	0	...	0	0

## Step 3: Selecting Emerging Technologies

The last step is identified the expectation of interested utilizations, based on the satisfaction and suitability. We evaluated the satisfaction of utilization based on the result of sentiment analysis. To do this, we identified overall utilization in online posts, and related posts are gathered. Then, we sum the weighted score of each post which to be used for classified into three categories: positive, neutral and negative posts of utilization. The satisfaction of utilization is estimated by followed ratio ( $R$ ) derived from the number of positive, neutral and negative posts. Where  $D_p$  is the number of positive posts for utilizations,  $D_N$  is the number of neutral posts for utilizations and  $D_n$  is the number of negative posts for utilizations.

$$R = \frac{D_p - D_n}{D_p + D_N + D_n} \quad (2)$$

Then, we estimated the suitability of utilization in terms of the expected usage of utilization. First, the level of difficulty for usage, that signified whether utilization could form the consensus of major application field, are identified. Based on the result of sentiment analysis, each utilization could determine the ranking of preference, and the rank of utilization could be different according to forum and blogs. To analyze this, we introduced a distance-based consensus index (Cook, 2006). The Rank-based distance was calculated by two indicator vectors:  $j$  forward indicator vector  $P+(j)$  and the position  $j$  backward indicator vector  $P-(j)$  were those vectors, whose  $k$ th components are defined as followed Formula (3) and (4). If an application  $k$  is appreciated for many potential users, the component of vector  $P+(j)$  tends to be lower than applications which is not appreciated for potential users.

$$(P^+(i))_k = \begin{cases} 1 & \text{if application } k \text{ is ranked in lower position than } j \\ 0 & \text{otherwise} \end{cases} \quad (3)$$

$$(P^-(i))_k = \begin{cases} 1 & \text{if application } k \text{ is ranked in higher position than } j \\ 0 & \text{otherwise} \end{cases} \quad (4)$$

Finally, rank-based distance function  $d_p(A, B)$  could be calculated as followed formula, where  $A, B$  is individual actors and  $n$  is the number of utilizations. If the opinion of utilization divided on the groups of potential users, the distance tended to increase.

$$d_p(A, B) = n(n-1) - \sum_j \left| \langle P_A^+(j), P_B^+(j) \rangle - \langle P_A^-(j), P_B^-(j) \rangle \right| \quad (5)$$

Second, the level of scope for usage is identified by the Shannon-Weaver index, which was major static indices for measuring variety and balance in various fields (Stirling, 2007). Where  $P_i$  is the proportion of posts contained  $i$ th utilization. This index increased when 1) the number of  $i$ th utilization became larger and 2) the distribution of  $P_i$  was more balanced. Thus, if the Shannon and Weaver index of the utilization increased, more varied utilization could be applied for facing with various potential issues in the future. Thus, Shannon and Weaver Index indicates the number of potential applications of utilizations and the level of balance of utilizations.

$$\sum_i p_i \ln \left( \frac{1}{p_i} \right) \quad (6)$$

## CASE STUDY

For conducting an empirical study, we selected Food processing technology that was one of the emerging technologies related to the process by which food manufactured. Food processing technology can cover the chemical, chemical, and biological methodologies to process raw ingredients into food and related transformation (Sun 2014). This technology could consider as a comprehensive technology field with two key characteristics: 1) a diverse range of technological activities such as macerating, liquefaction, emulsification, cooking processes, and many other types of food preservation activities and 2) a diverse range of processing mechanisms such as high pressure, ozone (O3), ultraviolet light (UV), Nano-processing. Numerous online reports and posts from non-academic fields as well as academic fields are constantly published to solve the unfavorable factors for human health.

### Step 1: Data Gathering and Keyword Extraction

First of all, this study selected several forums for food processing technologies. Their posts mainly involve information on the latest utilization of the emerging food processing technologies that expected to influence other fields. Then, several emerging technologies: Pulsed electric field, Cold plasma, and Nano processing are selected to evaluate the utilization. After that, we gathered 325 posts related three technologies from forums and blogs. We selected three communities that intensively discuss with food processing technologies. Their posts mainly contained information on the latest progress and applications of food processing technologies that could influence other fields. Table 1 shows the description of three communities.

**Table 1: Data Source of Study.**

Communities	Description	# of doc
Food safety megazine	Provide various cases that can improve the food industry	121
FoodsafetyTech	Provide reports that focused on the food industry in the future	110
Food Processing Technology	Provide cases and applications that focused on food preservation, consumer trends, and their related technologies	94

The next step was keyword extraction from posts. By conducting a text mining process, we extracted more than 1,500 keywords. These keywords classified into utilization keyword and sentiment keyword. Through the TF-IDF statistics, words in the upper 15% of extracted keywords (122 utilizations keywords and 125 sentiment keywords) were selected to identify the expectation of potential users. In this process, the combination phrase of sentiment words and emphatic adverb separated from original written words. These keywords would list in the keyword vector column, which contains the frequency of keywords per documents.

## Step 2: Word lexicon construction

The next process is the construction of word lexicons. The utilization keywords classified into similar utilization group. For example, several keywords such as flavor, look, color and savor have described as the flavor of processed food. When posts contained four keywords, we considered these posts as posts of utilizations related flavor preservation or improvement. On the contrary, there are several keywords that described a couple of utilization. For example, 'Protection' could describe three utilizations: 'Capsuled food and supplement (0.28)' and 'Safety processing and cooking (0.58)' and 'Packaging the food (0.24)'. In this case, a weight assigned to several utilizations by calculating the co-occurrence of other words of utilization. We also updated the frequency of utilization through the multiplication of the assigned weight of utilization and the number of posts that contained keywords. Similarly, extracted sentiment keywords are also assigned a positive or negative point through SentiWordNet.

Then, we construct keyword vectors for the extracted words. These vectors are composed of two parts. In utilization parts, we calculated the frequency of utilization word in posts by each utilization. Then, we assigned the expected utilization for potential users by each post. For instance, when post 1 included 5.4 weighted keywords of Microplastic and 2.1 weighted keywords of Capsuled food, these posts were considered as expected the utilization of Microplastic. Likewise, in sentiment parts, we calculated the summation of sentiment score by each post and identified the polarity of posts. The illustrated example of the keyword vector is in Figure 3. In Figure 3, the figure indicated the frequency of corresponding keywords in the corresponding post. For example, 5 meant that plastic is five times discovered in post 1.

**Figure 3: Illustrated examples of keyword vectors.**

Utilization	Microplastic		Capsuled food		...			Post	Utilization
Keyword	Plastic	Polymer	...	capsule	pill	...	...	Post 1	Microplastic
Post 1	5	2	...	2	0	...	...	Post 2	Beverage
Post 2	0	0	...	0	0	...	...	Post 3	Capsuled food
Post 3	0	0	...	1	3	...	...	...	...

Sentiment	Positive		Negative		...			Post	Sentiment
Keyword	love	friendly	...	hate	cheap	...	...	Post 1	Positive
Post 1	2	1	...	0	0	...	...	Post 2	Negative
Post 2	0	0	...	1	1	...	...	Post 3	Neutral
Post 3	0	0	...	0	0	...	...	...	...

### Step 3: Selecting Emerging Technologies

The last process is the evaluation of each utilization of emerging technologies. We calculated the sentiment ratio of each utilization as followed in Table 1. According to Table 1, the sentiment ratio was the positive score in a few utilizations of each emerging technology. We considered these utilizations as preferred utilizations by potential users.

**Table 2: Preferred utilizations for potential users.**

Communities	Preferred utilization	Sentiment Ratio
Pulsed electric field	Decontamination	0.097
	Flavor Preservation	0.072
	Liquid Food Processing	0.056
Cold plasma	Decontamination	0.102
	Thermo-sensitive Food Processing	0.076
	Nutrient Treatment	0.054
	Food Packaging	0.043
Nano Processing	Food Packaging	0.185
	Capsuled Food	0.116
	Food Inspection	0.085
	Nanoparticle in Food	0.023

Then, we calculate the distance-based consensus index and Shannon-Weaver index. Most of the posts only mentioned one or two utilizations of emerging technologies, so each forum was considered as individual actors. The calculation results summarized in Table 2. Consensus index increased when the number of utilization (n) also increased, so results of consensus summarized as the ratio: (calculated distance) / (maximum distance)

**Table 3: Evaluation result of emerging technologies.**

Communities	Consensus ratio	Shannon-weaver index	# of utilizations
Pulsed electric field	15.48%	0.970	3
Cold plasma	26.11%	1.106	4
Nano Processing	10.13%	1.186	4

Compared with Consensus index of each emerging technology, Nano processing was the lower than those of other technologies. This result meant that many users have similar the order of preference for utilization, so many users could expect similar utilization of technologies. In addition, compared with Shannon-weaver index of emerging technology, Nano processing was higher than these of other technologies. Many potential users expected various utilizations for Nano processing. They could have more plenty of opportunities to utilize Nano processing in different situations. Therefore, we could conclude that Nano processing is the most emerging technologies in Food processing technologies in terms of satisfaction and suitability for users.

## CONCLUSION

In this paper, we propose a framework that estimates the opinion of potential users to identify emerging technologies. In particular, we suggest two evaluation factors: satisfaction and suitability for evaluating emerging technologies. In the satisfaction aspect, we identify the potential users' preference for utilization through their frankly written posts. In suitability aspect, we identify the opinion of potential users in terms of the level of "scope" and "difficulty" for the usage the technologies. To do this, we utilize three indices: Sentiment score, Consensus index, and Shannon-Weaver index. Simple cases related to food processing technologies show how to process our framework that can systematically reflect the expectation of potential users.



The expected contributions of this approach are twofold. First, we suggested the research framework of evaluating the utilization of emerging technologies by analyzing the posts of potential users. We gathered the online posts contained the opinion of potential users that can evaluate the possible technological and social issues. Moreover, these posts can provide more progressed information about emerging technology included innovative applications for future threats. Second, we suggested two evaluation factors (Satisfaction & Suitability) to evaluate the emerging technologies through Consensus index, Diversity index, and Sentiment analysis. Previous evaluation of emerging technologies focused on only technical performance and related factors through time-series forecast model. However, potential user-oriented evaluation can provide the proper applications of emerging technologies in the future. Specially, we introduce sentiment score to can show the preference of potential users from online posts, and consensus index and Shannon-weaver index to show the disagreement of utilization in terms of usefulness.

Despite the contributions, this study is subject to several limitations. First, we analyze and evaluate only a few cases through our suggested framework. Thus, we should gather and evaluate more various cases to validate the usefulness and effectiveness of the suggested processes. Second, we deal with each criterion – satisfaction, and suitability as independent, when we select emerging technologies. Typically, the range of proper usage bore some proportionate relationship to the satisfaction of utilization. In future work, to identify the emerging technologies in the future, we try to construct the multi-criteria decision model such as PROMETHEE (Preference Ranking Organization METHod for Enrichment Evaluation), which can estimate the different utility function depending on the uncertainty through heterogeneous variables (Behzadian et al., 2010).

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# PRODUCT LIABILITY AS A CATALYST FOR INVESTMENTS INTO PRODUCT SAFETY?

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## ABSTRACT

*Product liability bears significant risks for a company: litigation, damages and negative market reactions. In order to adjust to such risks under the (in reality given) imperfect market conditions, this paper presents an approach to assess investments in product safety and to examine the determinants of their price ceiling. This maximum payable price depends on the (corrected) net present values of the payments and on the interdependencies arising from changes in the manufacturer's optimal investment and production programmes. On this basis one can prove that – differently to the usually assumed situation on perfect markets – the corrected net present values for employing partial processes need not to be value additive. Furthermore, higher risks for product liability may have unexpected and adverse effects on investments into product safety, i.e. they may even discourage them.*

**Keywords:** Product Liability, Investments, Corrected Net Present Values, Imperfect Markets, Price Ceiling.

## INTRODUCTION

*Product liability* – a term one finds repeatedly in international media resulting from class actions with exorbitant compensations for damages, often in connection with punitive elements. However, both science as well as practice usually take a qualitative point of view, mostly from a risk management perspective. This takes only partially into account that product liability may lead to a lot of *financial* consequences as well (Klingelhöfer, Kurz & Kurz, 2011, p. 243): besides and on top of insurance premiums and litigation cost, a manufacturer may still need to pay for (non-covered) compensations; they may need to recall their products and/or change critical components; negative perceptions by clients and the public can lead to a loss of market shares not only for the relevant product, but may also affect other products and services; additional image and advertisement campaigns to restore confidence may be necessary. Often, even small issues may result in severe financial losses. Therefore, dealing with product liability cannot be restricted to the optimisation of insurance covers.

Alternatively to insurance and financing of liability risks, the manufacturer can only resort to *risk avoidance* by additional safety, disclaimers or production reductions until abandonment and divestment. However, such decreased liability exposure concurs with increasing prevention costs on the other hand: higher production cost, rebates to be granted, forfeited earnings and/or insurance premiums. A prevention decision has to take all of them into account.

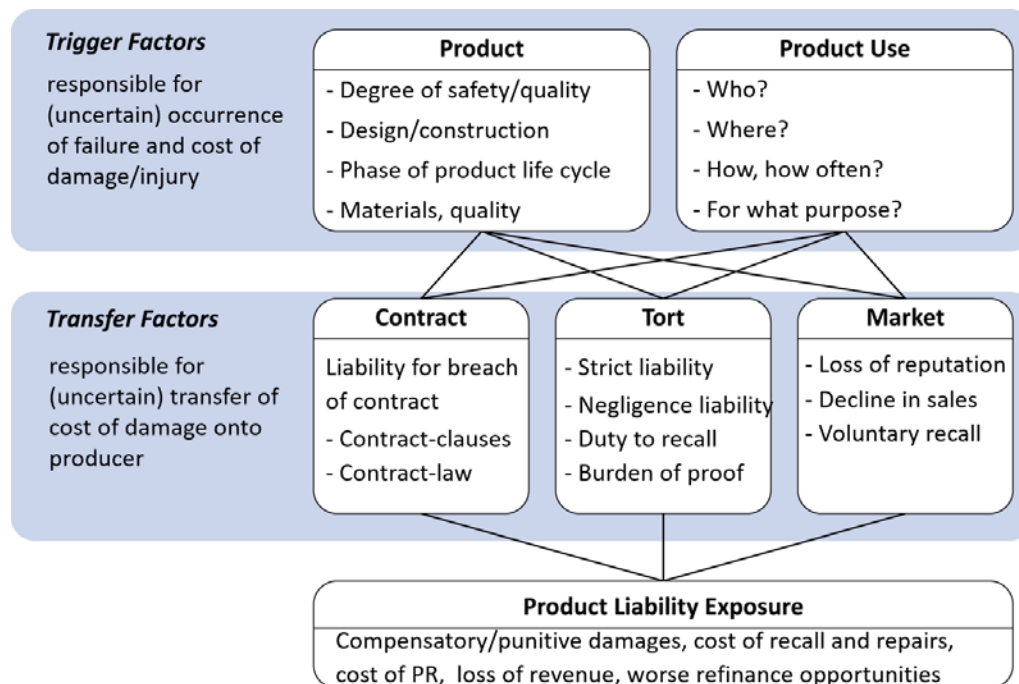
Therefore, this paper tries to investigate how product liability may affect decisions for investments into product safety. While under perfect market conditions, transferring the results of *Pigou* (1932, pp. 172, 174, 183, 224) for the effects of taxes and subsidies, one would expect an increasing need for such a mitigation the higher the perceived risk is. However, in reality markets are not perfect, but imperfect, and in particular with respect to product safety, constraints resulting from production and restricted capacities (and also from limited financial opportunities) must be taken into account. This means, that in theory (over-)compensation effects may be possible. Therefore, this paper presents an approach to assess investments into product safety and to examine the determinants of their price ceiling in imperfect markets. On this basis, it shall also investigate whether such overcompensation effects may indeed exist. If so, then this is for utmost importance for policy makers and courts since their decisions and judgements to compensate consumers for faulty products may lead to adverse effects with respect to increased consumer protection.

# MANIFESTATION OF PRODUCT LIABILITY FOR THE MANUFACTURER

## Components of the product liability risk

In principle, one can divide the components of product liability risk in *trigger* und *transfer factors* (Klingelhöfer, Kurz & Kurz, 2011; Wischermann, 1991). While the product and its use fall under the former, only the latter, i.e. contracts, tort or the market situation, lead to a responsibility transfer to the manufacturer (fig. 1):

Figure 1: Components of product liability risk.



Source: Klingelhöfer, Kurz & Kurz (2011), p. 244, based on Wischermann (1991).

Obviously, the manufacturer's influence on these components of product liability is limited: Regarding the *trigger factors*, he will only have little influence on the product use. However, product development and design (incl. the chosen materials, construction, complexity and testability) as well as the realised quality level, allow him to affect some risk parameters as well as the kind of usage, the height of a possible damage and the point in the product life cycle when it may occur (Klingelhöfer, Kurz & Kurz, 2011, pp. 243-245; Wischermann, 1991, pp. 76-78; Masing, 1994, p. 27). Product presentation, warnings and a good instruction manual may reduce usage damages and limit the resulting liability, while the marketing instruments allow for interaction with the user on safety issues and the necessary level of care (Rogler, 2002, p. 378; Eisenberg et al., 2008, pp. 173-175).

With respect to the *transfer factors*, the manufacturer may hardly do anything regarding the existing liability scheme and the market environment, but often he will be able to impact the contract conditions:

Usually, he will have to deliver free from defects and at the agreed quality, which will allow for a usage according to the contract. Otherwise the buyer might insist on supplementary performance or require a reduction of the purchase price or even withdraw from the contract; the seller may be liable for faults (Klingelhöfer, Kurz & Kurz

2011, p. 244; Wischermann 1991, pp. 83 f.). Further claims may result from guarantees and secondary obligation like duties of disclosure, to advise (inform, instruct, or warn) or to care – and, finally, legally from tort law, in particular in its facets of strict liability and negligence liability. While strict liability results from a failure in manufacturing, design or information, negligence refers to the failure to exercise reasonable care in design, construction, manufacturing, information, surveillance (Klingelhöfer, Kurz & Kurz 2011, p. 246).

## Microeconomic adjustment to product liability law

Since, according to the previous, the user normally only has a limited opportunity to judge the product's safety and, therefore, usually is not able to influence the occurrence of a product damage, his behaviour can be seen as a datum for the manufacturer. This allows for assuming a *unilateral* view. Then, the manufacturer's costs  $C$  resulting from a product liability consist of the expected cost of a damage/loss  $ECD$  and his cost for damage prevention  $CDP$  (for the following cp. analogously Klingelhöfer 2000, pp. 205-209; 2013, pp. 12-13):

$$(1) \quad C = CDP + ECD$$

$ECD^2$  will decline and  $CDP$  increase with the level of his precaution  $pre$  (standard of care):

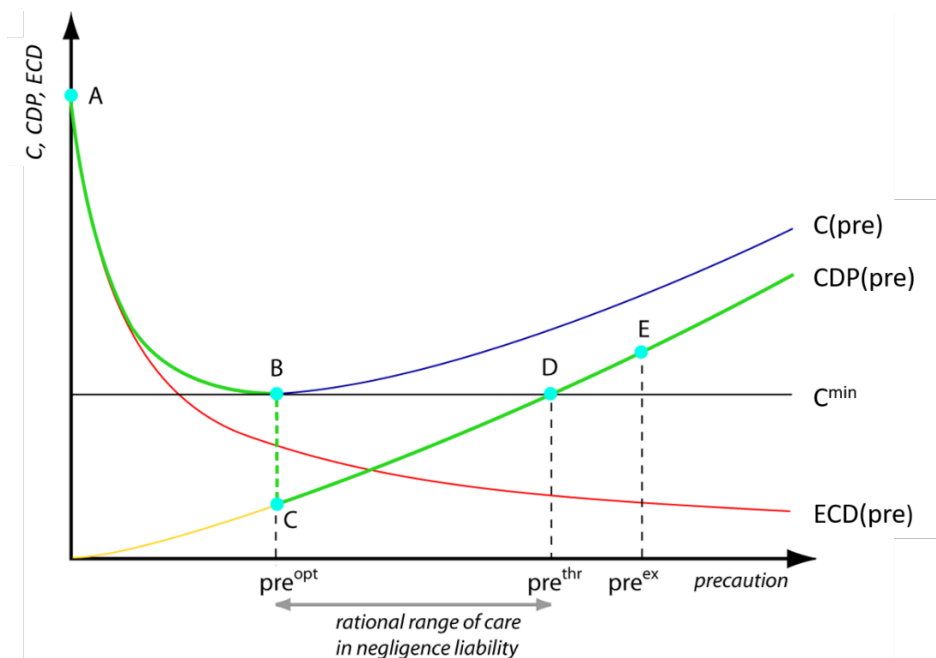
$$(2) \quad \partial ECD / \partial pre \leq 0,$$

$$(3) \quad \partial CDP / \partial pre \geq 0$$

*Punitive* elements (as according to US laws) and compensations for immaterial damage, pain or suffering can be included via a factor or a summand to the amount of damage. Thus, taking the preventative activities into account, one can write instead of (1) (figure 2):

$$(4) \quad C(pre) = CDP(pre) + ECD(pre)$$

**Figure 2: The (slightly expanded) basic liability model.**



Source: own, based on Klingelhöfer (2000), pp. 205-209, and Endres (2001), pp. 23-33, 41-51.

According to fig. 2, the total cost of product liability  $C$  reach their minimum  $C^{\min}$  in point B. In case of *strict liability*, this point would also represent the manufacturer's optimal level of precaution  $pre^{opt}$ , while in case of negligence liability, depending on the level of his standard of care, the costs incurred by the manufacturer may be even lower than the sum of ECD and CDP: exercising the precaution  $pre^{nec}$  demanded by the courts, the manufacturer is no longer liable for the damage, so that only prevention costs CDP occur. Thus, the cost function  $C(pre)$  will have a jump discontinuity in  $pre^{nec}$  (cp. the jump from point B to C in fig. 2).

$$(5) \quad C(pre) = \begin{cases} CDP(pre) + ECD(pre) & \text{for } pre < pre^{nec} \\ CDP(pre) & \text{for } pre \geq pre^{nec} \end{cases}$$

In the end, this is true for all the necessary precaution levels which are smaller than the threshold level  $pre^{thr}$ :  $pre^{nec} \leq pre^{thr}$ . However, if the courts demand a higher level of necessary precaution than  $pre^{thr}$  (i.e.  $pre^{nec} > pre^{thr}$ ) like the excessively high one  $pre^{ex}$  in fig. 2, it would not make sense to follow this demand from a cost perspective. Instead, one would just realise the optimal level  $pre^{opt}$ : on this level  $pre^{opt}$  one would reach point B again, while the excessively high level  $pre^{ex}$  would lead to point D with much higher cost just for damage prevention in comparison to the relatively small total cost in B for precaution and expected damages.

## ASSESSMENT OF INVESTMENTS INTO PRODUCT SAFETY

### Background: Investment assessment on imperfect markets under uncertainty

Assessing an investment into product safety to reduce product liability needs to consider the decision maker's individual objectives and decision field, i.e. in particular the production situation (of the potentially harmful products). Therefore, a valuation employing cost-based approaches, discounted cash flow (DCF) models or real options analyses is no longer appropriate: their underlying condition of perfect markets does not concur with the existence of such decision relevant market imperfections. This may result already from restricted or differing borrowing and lending conditions, as shown for two points in time by Hirshleifer (1958). Furthermore, manufacturing companies may have other opportunities than the financial market – like investing in other technologies or increasing/reducing production. Then, calculating ordinary (net) present values by discounting expected cash flows with exogenous interest rates (even if adjusted to uncertainty) and real options values become inadequate for the financial valuation of technology investments. This becomes even more significant as other requisites for the application of real option pricing models usually are not fulfilled by the characteristics of investments into product safety either.<sup>3</sup>

Therefore, instead of calculating the investment's value solely by discounting cash flows with a single market interest rate, a theoretically correct (partial) appraisal demands the endogenous marginal rates of return of the best alternatives. Also, a mere calculation of the net present value NPV of an additional object does not say much regarding its profitability, because such an NPV does not account for capacity shortages resulting from the realisation of this additional object, which, subsequently, may also alter the decision relevance of other objects or capacities (i.e. binding restrictions of the manufacturer's investment and production programme may change). Consequently, assessing the degree of profitability of an additional single investment or activity within imperfect markets means a comparison of the situation after investing [i.e. the valuation programme (VP)] to the one before investing [i.e. the basic programme (BP)] (Hering 2014, pp. 60–62; Jaensch 1966, pp. 664–665; Klingelhöfer 2006, pp. 59–91; Matschke 1975, pp. 253–257, 387–390). By doing so, a sensible approach implicitly considers (differently from neoclassical approaches) that such a technology investment is usually indivisible – it is either undertaken entirely or not at all. In case of a greater maximum value in the VP than in the BP, investing becomes reasonable. Ensuring this by means of a minimum withdrawal constraint, the VP computes the *price ceiling*  $p_I^{opt}$ , that is, the highest possible price  $p$  the company could afford for investing into product safety. Employing duality theory of linear programming then allows for examining

its determinants and delivers information for the theoretically correct calculation of the (corrected) net present values of possible activities, and sensitivity analyses reveal the impact of parameter changes on the investment's profitability.

*Uncertainty* may be taken into account by using decision trees (Magee 1964a, 1964b; Mao 1969; and in the context of investment planning Klingelhöfer 2006, pp. 59-83; Laux 1971, pp. 19-22, 39-44). Starting with  $s = 0$  for the already realised and, therefore, known state in  $t = 0$ , the set  $S = \{0; 1; \dots; S\}$  also includes the  $S$  possible future states  $s$  until the time horizon  $t = T$ . Although presenting itself graphically in a (two-dimensional) tree structure, this set may still be easily treated as a one-dimensional mathematical structure by consecutively numbering the states from  $s = 0$  to  $s = S$ . Hence, mathematically, the valuation under uncertainty does not differ from the one under certainty (where each point in time  $t$  would be represented by exactly one state  $s$ ). However, in the economical interpretation, this means that *all* payments in *all* possible states are considered. At least, because of the given mathematical structure, the decision maker does not need to know probabilities, means or variances, so that the restrictive assumptions of the *Bernoulli* principle together with its axioms are no longer needed. Instead, the decision maker only depends on information on which states may occur with positive probability, as simple dominance considerations are sufficient.

## Basic considerations to formalise product liability

While the manufacturer has only limited possibilities to influence the product use, he can indeed determine which products he wants to manufacture for which kind of usage and in which production environment, the product development and design as well as the realised quality level. This still allows him to affect several risk parameters, the point in the product life cycle of a possible damage and its height. Hence, an appraisal of an investment into product safety should take these factors into account. For this reason, activity analysis shall be employed (Koopmans, 1957, pp. 71-83; 1959; Debreu, 1959, pp. 37-49; Nikaïdo, 1968, pp. 180-185; Klingelhöfer 2000, pp. 222-252, 417-442): every technically possible (joint) production  $\underline{\varphi} = (\underline{r}'; \underline{x}')' = (r_1, \dots, r_m; x_1, \dots, x_n)'$  with the  $m$  inputs  $r_\mu$  (e.g., fuel, material, labour) and the  $n$  wanted and unwanted outputs  $x_\nu$  (e.g. products, heat, emissions, waste) results as a linear combination of the  $q$  basic activities  $\underline{\varphi}^{B,\beta}$  with non-negative coefficients  $\lambda^\beta$  describing their levels (underlining a variable denotes a vector and the added prime, i.e. the symbol  $'$ , the transposition of a vector):

$$(6) \quad \underline{\varphi} = \sum_{\beta=1}^q \underline{\varphi}^{B,\beta} \cdot \lambda^\beta \quad \text{with } \lambda^\beta \geq 0, \beta = 1, \dots, q$$

Valuing the  $m+n$  resources and products  $\varphi_\varepsilon$  with (positive or negative) prices  $p_\varepsilon$  delivers the *contribution margin*  $CM(\underline{\varphi})$  as a sum of the process specific contribution margins:

$$(7) \quad CM(\underline{\varphi}) = \underline{p}' \cdot \underline{\varphi} = \underline{p}' \cdot \sum_{\beta=1}^q \underline{\varphi}^{B,\beta} \cdot \lambda^\beta = \sum_{\beta=1}^q \sum_{\varepsilon=1}^{m+n} p_\varepsilon \cdot \varphi_\varepsilon^{B,\beta} \cdot \lambda^\beta = CM(\underline{\lambda})$$

On this basis it is possible to integrate the *cost of a liability scheme* according to (4) for strict liability or (5) for negligence. Since the manufacturer's liability depends (amongst others) on the quantity of products sold, one may rewrite (2) as:

$$(8) \quad \partial ECD / \partial \varphi_\varepsilon \geq 0$$

Nonetheless, with respect to product liability, this seems to be thought too easily: c.p. the manufacturer's rational adaption to an increasing liability risk would be just to reduce sales until the product disappears from his programme. This concern gets aggravated by the fact that (2) refers to products, while according to the definition of  $\varphi_\varepsilon$  (8) includes resources. However, since the vectors  $\underline{\varphi}^{B,\beta}$  represent joint production,  $x_\nu$  may also stand for potentially dangerous product *components*.<sup>4</sup> Indeed, *their reduction leads to increasing precaution*. Furthermore, as potentially



dangerous components often result from a certain production input (component),<sup>5</sup> the generalisation to  $\varphi_\varepsilon$  appears to be reasonable. Since the expected cost of damages ECD diminish the success of production, (7) needs to be adjusted:

$$(9) \quad CM(\underline{\varphi}) = \underline{p}' \cdot \underline{\varphi} - \sum_{\varepsilon=1}^{m+n} ECD(\varphi_\varepsilon)$$

In doing so, the constraint for the maximum allowed quantity  $\varphi_\varepsilon^{\max, \text{old}} \geq 0$  of the dangerous substances to be exempted from liability has to be adjusted for the (maximum) *excess*  $\varphi_\varepsilon^{\max, \text{exc}}$  until the new limit  $\varphi_\varepsilon^{\max, \text{new}}$ :

$$(10) \quad \varphi_\varepsilon \leq \varphi_\varepsilon^{\max, \text{old}} + \varphi_\varepsilon^{\max, \text{exc}} = \varphi_\varepsilon^{\max, \text{new}} \quad \forall \varepsilon$$

Depending on the choice of  $\varphi_\varepsilon^{\max, \text{exc}}$  (e.g. as a limit where negligence will become criminally relevant, too) this may even mean that any new maximum level no longer exists. Depending on the severity of consequences and modelled in the same way, several levels of excessive production  $\varphi_\varepsilon^{\max, \text{exc}1}$ ,  $\varphi_\varepsilon^{\max, \text{exc}2}$  etc., which lead to staggered new upper limits  $\varphi_\varepsilon^{\max, \text{new}1}$ ,  $\varphi_\varepsilon^{\max, \text{new}2}$  etc., are possible as well.

In case of non-linear ECD and CM, (9) and (10) may be substituted by (11) and (12) employing partial amounts  $\varphi_{\varepsilon h}$  of  $\varphi_\varepsilon$  with a *constant rate of expected costs of damages*  $\text{ecd}_{\varepsilon h}$  in the H intervals h. Thus,  $ECD(\varphi_{\varepsilon h}) = ECD(\lambda_h^\beta)$  will be linearly dependent on  $\varphi_{\varepsilon h}$  and, therefore, on  $\lambda_h^\beta$  in each interval h.

$$(11) \quad CM(\underline{\varphi}) = \underline{p}' \cdot \underline{\varphi} - \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^H ECD(\varphi_{\varepsilon h}) = \sum_{\beta=1}^q \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^H (p_\varepsilon - \text{ecd}_{\varepsilon h}) \cdot \varphi_\varepsilon^{B, \beta} \cdot \lambda_h^\beta$$

$$(12) \quad \varphi_\varepsilon = \sum_{h=1}^H \varphi_{\varepsilon h} = \sum_{\beta=1}^q \sum_{h=1}^H \varphi_\varepsilon^{B, \beta} \cdot \lambda_h^\beta \leq \varphi_\varepsilon^{\max, \text{old}} + \varphi_\varepsilon^{\max, \text{exc}} = \varphi_\varepsilon^{\max, \text{new}} \quad \forall \varepsilon$$

Additionally, constraints for the amounts in the H partial intervals h have to be considered:

$$(13) \quad 0 \leq \varphi_{\varepsilon h} = \sum_{\beta=1}^q \varphi_\varepsilon^{B, \beta} \cdot \lambda_h^\beta \leq \varphi_{\varepsilon h}^0 \quad \forall \varepsilon \quad \forall h$$

where

$$(14) \quad \sum_h \varphi_{\varepsilon h}^{\max} = \varphi_\varepsilon^{\max, \text{new}} \quad \forall \varepsilon$$

However, since the potentially dangerous amounts  $\varphi_\varepsilon^\beta$  of different processes  $\beta$  may compensate each other, it is generally not possible to derive *other* upper limits  $\lambda_h^{\beta, \max}$  than  $\lambda_h^{\beta, \max}$  for the (partial) production levels  $\lambda_h^\beta$ : increasing quantities  $\varphi_\varepsilon^{\beta*}$  from process  $\beta^*$  leave less space for production with process  $\beta$  in intervals h with low  $\text{ecd}_{\varepsilon h}$ .

$$(15) \quad \sum_{h=1}^H \lambda_h^\beta \leq \lambda^{\beta, \max} \quad \forall \beta \in \{1; 2; \dots; q\}$$

With respect to investment assessment in the next sections this leads to consequences for the corrected net present values  $NPV^{\text{corr}}$  of the partial processes  $h$ : in each state  $s$ , the adjusted constraint (15) leads to a *common* dual variable  $\zeta_s^\beta$  – and, therefore, (after division by  $l_0$ ) to the *same* upper limit for *all* the  $NPV^{\text{corr}}$  of the  $H_s$  partial processes  $h$ . However, this is understandable because it is still the very same process  $\beta$  – just split for mathematical reasons.

Furthermore, if the rates  $ecd_{eh}$  of the expected costs of damages do not decline with the amount of potentially dangerous substances  $\varphi_\varepsilon$  (ECD is then *convex*), special order conditions for the intervals  $h$  are not necessary, and one only needs the conditions (11), (13), and (15). As a result both strict liability and negligence liability are modelled:

- For **strict liability**, where the manufacturer is liable for a damage, irrespectively of the standard of care he kept, one has to set  $\varphi_\varepsilon^{\max, \text{old}} = 0$  and  $ecd_{eh} > 0 \forall h$ .
- In a scheme of **negligence liability**, the manufacturer only has to compensate if the potentially dangerous substances exceed  $\varphi_\varepsilon^{\max, \text{old}} > 0$ . Then  $ECD(\varphi_\varepsilon) = 0$  and, therefore,  $ecd_{eh} = 0$  for  $\varphi_\varepsilon \leq \varphi_\varepsilon^{\max, \text{old}}$ . (Hence, usually  $\varphi_{\varepsilon 1}^{\max} = \varphi_\varepsilon^{\max, \text{old}}$ .) Violation of  $\varphi_\varepsilon^{\max, \text{old}}$  leads to  $ecd_{eh} > 0$ . Thus,  $ecd_{eh}$  can be interpreted as the *rate of punitive costs* when the production/input of the dangerous substances exceeds given limits. Hence, the *similarity of product liability to the effects of a tax system* becomes evident. Moreover, varying the value of the upper bound  $\varphi_\varepsilon^{\max, \text{old}}$  demonstrates that *strict liability can be interpreted as a borderline case of negligence liability*.

In case of a product liability insurance, additional insurance premiums  $ipr_{eh}$  have to be considered in (11), while the rate for the manufacturer's remaining expected cost of damages  $ecd_{eh}^*$  will decrease:  $0 \leq ecd_{eh}^* < ecd_{eh}$ .<sup>6</sup>

$$(16) \quad CM(\underline{\varphi}) = \sum_{\beta=1}^q \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^H \left( p_\varepsilon - ecd_{eh}^* - ipr_{eh} \right) \cdot \varphi_\varepsilon^{B, \beta} \cdot \lambda_h^\beta$$

Depending on the fact, whether  $ecd_{eh}^*$  is 0 in a certain interval  $h$  or not, this presentation covers both the cases that the insurance pays for the whole damage or only for a part. If the manufacturer has to pay an excess or in case the insurance only covers up to a maximum claim, then  $ecd_{eh}^* > 0$  in the respective intervals  $h$ . However, in the next sections, the indexing of  $ecd_{eh}^*$  with an asterisk will no longer be necessary since it then follows from the individual specification whether  $ecd_{eh}$  refers to the (remaining) expected cost of damage with or without insurance.

Different to ECD, the *cost of damage prevention* CDP are already taken into account as opportunity cost of production if, as a consequence of product liability, the otherwise possible production can no longer be run to full potential,<sup>7</sup> and/or by the fact that the investment to be assessed will be realised exactly for this reason, i.e. to reduce the inherent risks. Therefore, CDP is already considered model immanently.

## Model for the Financial Valuation of Investments into Product Safety

As mentioned above, an investment appraisal on imperfect markets under uncertainty can be done by comparing the situation after investing (i.e. the VP) to the one before investing (the BP). An operationalisation of the maximum value to be calculated by the BP may be the maximisation of the sum SWW of weighted withdrawals  $w_s \cdot W_s$  subject to the constraints of investment and production – with  $s \in \{0; 1; 2; \dots; S\}$  denoting the  $S + 1$  states from today ( $s = 0$  in  $t =$

0) to time horizon  $t = T$  and the weights  $w_s$  expressing to which degree the decision maker prefers payments in the regarded states relative to payments in the other states.<sup>8</sup> Deriving the constraint system, one has to consider that investments into product safety affect production. Therefore, it is necessary to integrate contribution margins, production constraints and the payments resulting from product liability law. While the production constraints directly become part of the constraint system, the contribution margins CM according to (16)<sup>9</sup> modify the investment programme's liquidity constraints (Klingelhöfer, 2006, pp. 127-130, 271 f.): liquidity must be guaranteed with respect to all the payments from production and product liability,  $z_{js}$  from the other projects  $inv_j$  (e.g. credits or loans), the payments  $uz_s$  which are independent of production quantities and the investment programme (e.g. additional individual deposits, fixed rents, taxes or payments determined in former periods), and the withdrawals  $W_s$ , – otherwise the company becomes insolvent. Thus, the following linear programming problem can be derived as the BP:

$$(17) \quad \mathbf{max. SWW}, \quad SWW := \sum_{s=0}^S w_s \cdot W_s$$

Subject to:

a) Liquidity constraints (capital budget constraints) for the  $S+1$  states  $s$  (cp. (16)):

$$-\sum_{j=1}^J z_{js} \cdot inv_j - \sum_{\beta=1}^q \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^{H_s} (p_{\varepsilon s} - ecd_{\varepsilon hs} - ipr_{\varepsilon hs}) \cdot \varphi_{\varepsilon}^{B,\beta} \cdot \lambda_{hs}^{\beta} + W_s \leq uz_s \quad \forall s \in S$$

b)  $\Gamma_s$  production constraints  $\gamma$  for the  $S+1$  states  $s$  (employing restriction coefficients  $a_{\varepsilon\gamma s}$ ):

$$\sum_{\beta=1}^q \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^{H_s} a_{\varepsilon\gamma s} \cdot \varphi_{\varepsilon}^{B,\beta} \cdot \lambda_{hs}^{\beta} \leq b_{\gamma s} \quad \forall \gamma \in \{1; 2; \dots; \Gamma_s\} \quad \forall s \in S$$

c) Production constraints resulting from product liability (cp. (13)):

$$\sum_{\beta=1}^q \varphi_{\varepsilon}^{B,\beta} \cdot \lambda_{hs}^{\beta} \leq \varphi_{\varepsilon hs}^{\max} \quad \forall \varepsilon \in \{1; 2; \dots; m+n\} \quad \forall h \in \{1; 2; \dots; H_s\} \quad \forall s \in S$$

d)  $q$  activity level constraints, which also consider the partial processes, for the  $S+1$  states  $s$  (cp. (15)):

$$\sum_{h=1}^{H_s} \lambda_{hs}^{\beta} \leq \lambda_s^{\beta, \max} \quad \forall \beta \in \{1; 2; \dots, q\} \quad \forall s \in S$$

e) Quantity restrictions of the  $J$  other investment objects and financial transactions:

$$inv_j \leq inv_j^{\max} \quad \forall j \in \{1, \dots, J\}$$

f) Non-negativity conditions:

$$\lambda_{hs}^{\beta}, inv_j, W_s \geq 0 \quad \forall \beta \in \{1; \dots, q\} \quad \forall h \in \{1; 2; \dots, H_s\} \quad \forall j \in \{j = 1; \dots, J\} \quad \forall s \in S.$$

Its optimal solution  $SWW^{opt}$  serves as a benchmark for the profitability of an investment  $I$  into product safety for process  $q$  (w.l.o.g.). This means that the VP has to ensure that – after realising the investment – the investor receives at least the same sum of weighted withdrawals again (minimum withdrawal constraint). Then, surplus money allows

either for consumption or could be used to pay for the investment (its price  $p_I$ ). Hence, the VP calculates the highest price the decision maker could afford for realising the investment, that is, its *price ceiling*  $p_I^{\text{opt}}$ . Besides this different objective function VAL and the minimum withdrawal constraint, the VP resembles structurally the BP. However, it also includes all the activity level-dependent and -independent payments caused by this investment. Therefore, with respect to the liquidity, the replacement of the contribution margins according to (16), as well as the price  $p_I$  of the investment and other activity level-independent payments  $z_{Is}$  (e.g. for its installation) have to be considered.

$$(18) \quad \mathbf{max. VAL;} \quad \text{VAL} := p_I$$

Subject to:

a) Liquidity constraints (capital budget constraints) for the S+1 states  $s$  (cp. (17a)):

$$\begin{aligned} & -\sum_{j=1}^J z_{j0} \cdot \text{inv}_j - \sum_{\beta=1}^{q-1} \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^{H_0} (p_{\varepsilon 0} - \text{ecd}_{\varepsilon h 0} - \text{ipr}_{\varepsilon h 0}) \cdot \varphi_{\varepsilon}^{B,\beta} \cdot \lambda_{h0}^{\beta} + W_0 + p_I \\ & \leq uz_0 + z_{I0} + \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^{H_0} (p_{\varepsilon 0} - \text{ecd}_{\varepsilon h 0} - \text{ipr}_{\varepsilon h 0}) \cdot \varphi_{\varepsilon}^{B,I} \cdot \lambda_{h0}^I \\ & -\sum_{j=1}^J z_{js} \cdot \text{inv}_j - \sum_{\beta=1}^{q-1} \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^{H_s} (p_{\varepsilon s} - \text{ecd}_{\varepsilon h s} - \text{ipr}_{\varepsilon h s}) \cdot \varphi_{\varepsilon}^{B,\beta} \cdot \lambda_{hs}^{\beta} + W_s \\ & \leq uz_s + z_{Is} + \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^{H_s} (p_{\varepsilon s} - \text{ecd}_{\varepsilon h s} - \text{ipr}_{\varepsilon h s}) \cdot \varphi_{\varepsilon}^{B,I} \cdot \lambda_{hs}^I \quad \forall s \in S \setminus \{0\} \end{aligned}$$

b)  $\Gamma_s$  production constraints  $\gamma$  for the S+1 states  $s$  (employing restriction coefficients  $a_{\varepsilon\gamma s}$ ):

$$\sum_{\beta=1}^{q-1} \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^{H_s} a_{\varepsilon\gamma s} \cdot \varphi_{\varepsilon}^{B,\beta} \cdot \lambda_{hs}^{\beta} + \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^{H_s} a_{\varepsilon\gamma s} \cdot \varphi_{\varepsilon}^{B,I} \cdot \lambda_{hs}^I \leq b_{\gamma s} \quad \forall \gamma \in \{1; \dots; \Gamma_s\} \quad \forall s \in S$$

c) Production constraints resulting from product liability (cp. (13)):

$$\sum_{\beta=1}^{q-1} \varphi_{\varepsilon}^{B,\beta} \cdot \lambda_{hs}^{\beta} + \varphi_{\varepsilon}^{B,I} \cdot \lambda_{hs}^I \leq \varphi_{\varepsilon h s}^{\max} \quad \forall \varepsilon \in \{1; 2; \dots; m+n\} \quad \forall h \in \{1; 2; \dots; H_s\} \quad \forall s \in S$$

d)  $q$  activity level constraints, which also consider the partial processes, for the S+1 states  $s$  (cp. (15)):

$$\sum_{h=1}^{H_s} \lambda_{hs}^{\beta} \leq \lambda_s^{\beta, \max} \quad \forall \beta \in \{1; 2; \dots; q-1; I\} \quad \forall s \in S$$

e) Quantity restrictions of the  $J$  other investment objects and financial transactions:

$$\text{inv}_j \leq \text{inv}_j^{\max} \quad \forall j \in \{1, \dots, J\}$$

f) Minimum withdrawal constraint (ensuring that the utility is not less than before):

$$-\sum_{s=0}^S w_s \cdot W_s \leq -\text{SWW}^{\text{opt}}$$

g) Non-negativity conditions:

$$\lambda_{hs}^\beta, \text{inv}_j, W_s \geq 0 \quad \forall \beta \in \{1; \dots; q-1; I\} \quad \forall h \in \{1; 2; \dots; H_s\} \quad \forall j \in \{j = 1; \dots; J\} \quad \forall s \in S$$

$$p_I \in \mathbb{R}$$

Besides the investment's price  $p_I$  and the activity levels  $\lambda_{hs}^I$  of the partial processes of the now safer process I (instead of q before), the BP and the VP contain the same decision variables: the activity levels  $\lambda_{hs}^\beta$  of the partial processes h of the q – 1 old processes  $\beta$ , the quantities  $\text{inv}_j$  of the other financial objects j, and the withdrawals  $W_s$ . In both programmes, the contribution margins (16) modify the liquidity constraints, while (13) and (15) are constraints.

## PRODUCT LIABILITY AND THE WILLINGNESS TO INVEST INTO PRODUCT SAFETY

### (Corrected) Net Present Values and the Price Ceiling for the Investment

If both the BP and the VP have a finite and positive optimal solution, applying duality theory of linear programming allows for obtaining information about the determinants of the maximum payable price. In order to interpret them economically, at first (corrected) net present values shall be derived:

By introducing the dual variables

- $l_s$  for the liquidity constraints (and the resulting discount factors  $\rho_{s,0} = l_s/l_0$ ),
- $\pi_{\gamma s}$  for the production constraints,
- $\zeta_{ehs}^{\text{PLL}}$  for the constraints of the intervals h with constant rate of expected costs for damages resulting from product liability and with constant insurance premiums,
- $\zeta_s^\beta$  for the activity level constraints,
- $\xi_j$  for the limits of the other investment objects and financial transactions;

and dividing the dual constraints by  $l_0$ , one obtains the (*corrected*) net present values  $\text{NPV}^{(\text{corr})}$  of:<sup>10</sup>

- using the partial processes h of the processes  $\beta \in \{1; 2; \dots; q-1; I\}$  in the states s:

$$(19) \quad NPV_{\lambda h, \beta s}^{corr} := \underbrace{\sum_{\varepsilon=1}^{m+n} (p_{\varepsilon s} - ecd_{\varepsilon hs} - ipr_{\varepsilon hs}) \cdot \varphi_{\varepsilon}^{B, \beta} \cdot \frac{1_s}{l_0}}_{NPV_{\lambda h, \beta s}} - \underbrace{\left( \sum_{\gamma=1}^{\Gamma_s} \sum_{\varepsilon=1}^{m+n} a_{\varepsilon \gamma s} \cdot \varphi_{\varepsilon}^{B, \beta} \cdot \frac{\pi_{\gamma s}}{l_0} + \sum_{\varepsilon=1}^{m+n} \varphi_{\varepsilon}^{B, \beta} \cdot \frac{\zeta_{\varepsilon hs}^{PLL}}{l_0} \right)}_{Correction} \leq \frac{\zeta_s^{\beta}}{l_0}$$

$NPV_{\lambda h, \beta s}^{corr} :=$  discounted contribution margin (incl. the expected cost of damages and insurance premiums)

– discounted monetary equivalent of the required capacity of the production constraints (including the relevant restrictions resulting from product liability)

- the realisation of other investment objects and financial transactions j:

$$(20) \quad NPV_{inv, j} := \sum_{s=0}^S z_{js} \cdot \frac{1_s}{l_0} = \sum_{s=0}^S z_{js} \cdot p_{s,0} \leq \frac{\xi_j}{l_0}$$

$NPV_{inv, j} :=$  discounted payments

Because of the complementary slackness conditions between primal decision variables and corresponding dual restrictions, the known decision rules for NPVs on perfect markets can only be applied to these (corrected) NPVs (19) and (20) on imperfect markets:<sup>11</sup> It only makes sense to employ a process  $\beta$  in state  $s$  ( $\lambda_s^{\beta} > 0$ ) or to realise another financial object  $j$  ( $inv_j > 0$ ) if the corresponding inequality (19) resp. (20) is fulfilled as an equation greater 0 or (for boundary objects) equal 0. This is intuitively understandable: since the use of restricted capacities diminishes the available amount for other advantageous processes, the NPVs of the (partial) processes not only have to take into account the discounted contribution margins, but also the required capacities. Furthermore, product liability exerts *three, partly opposing effects* on the use of a (partial) process:

1. The expected costs of damages reduce the possible cash flow surplus.
2. The discounted monetary equivalents of the required capacity intervals  $h$  resulting from product liability increase the correction terms.
3. Violation of constraints resulting from product liability allows for employing further (partial) processes – with the result of additional positive corrected net present values.

Hence, *ceteris paribus*, higher product liability risks lead to a loss of profitability of a process. However, resulting from interdependencies the need to restructure production may arise. Then, changes in the dual variables may allow processes which have thus far been disadvantageous to become profitable because others are charged greater penalties. To gain further information on this effect, sensitivity analysis will be employed in the next section.

Moreover, since according to (19) the  $NPV^{corr}$  of *all* partial processes  $h$  of one process  $\beta$  are restricted by the *same* dual variable  $\zeta_s^{\beta}$ , which is independent of the intervals  $h$  and can only be positive if the corresponding primal constraint  $\sum_{h=1}^{H_s} \lambda_{hs}^{\beta} \leq \lambda_s^{\beta, max}$  is fulfilled as an equation, one can derive for the partial processes employed in the optimal solution:

- *Either only one* partial process  $h$  of process  $\beta$  has an  $NPV^{corr} > 0$  (meaning that process  $\beta$  is *not* divided into partial processes and that  $ecd_{\varepsilon s}$  remains constant until the maximum activity level  $\lambda_s^{\beta, max}$ )

- or – in the case of more than one partial process with  $\text{NPV}_{\lambda h, \beta s}^{\text{corr}} > 0$  – all partial processes h have the *same positive corrected net present value which is also the corrected net present value of the whole process  $\beta$* :

As a result of these considerations, one can write in both cases:

$$(21) \quad \text{NPV}_{\lambda, \beta s}^{\text{corr}} = \text{NPV}_{\lambda h, \beta s}^{\text{corr}} = \zeta_s^\beta \quad \forall \text{NPV}_{\lambda h, \beta s}^{\text{corr}} > 0$$

Employing the  $\text{NPV}^{(\text{corr})}$  (19) and (20) under consideration of (21) allows for identifying the determinants of the price ceiling for an investment into product safety. If, to both the primal and the dual problem, positive and finite solutions exist, then, according to duality theory of linear programming, both problems have the *same* optimal solution. Hence, one can gain information concerning the price ceiling  $p_I^{\text{opt}}$  from the optimal solution to the VP's dual problem. Furthermore, via the withdrawal constraint in the VP, this optimal solution also considers the impact resulting from the one ( $\text{SWW}^{\text{opt}}$ ) of the BP. Ergo, if the BP also has an optimal solution, the equal one to its dual can substitute  $\text{SWW}^{\text{opt}}$  in the minimum withdrawal constraint of the VP. Consequently, using the optimal solutions to both the dual problems, the equation for  $p_I^{\text{opt}}$  contains a variety of corresponding dual variables of both programmes.

Nevertheless, an economic interpretation is possible by resorting to the (corrected) net present values (19)-(21). For positive primal variables  $\lambda_{hs}^\beta$  of the activity levels or  $\text{inv}_j$  for the maximum realisation of the other investment and finance projects, the *complementary slackness conditions* force the corresponding inequality (19) or (20) to be satisfied as an equation. Thus, all the *positive* dual variables  $\zeta_s^\beta$  and  $\xi_j$  of the VP and the BP can be substituted by the corresponding  $\text{NPV}^{(\text{corr})}$ .<sup>12</sup> Introducing the dual variable  $\delta$  of the withdrawal constraint leads to an equation for the *maximum price*  $p_I^{\text{opt}}$  an investor can afford to invest into product safety as a sum of several (partly corrected) NPVs:<sup>13</sup>

$$(22) \quad p_I^{\text{opt}} = \underbrace{\sum_{s=0}^S z_{Is} \cdot \rho_{s,0}^{\text{VP}}}_{\text{I}} + \underbrace{\sum_{\text{NPV}_{\lambda, Is}^{\text{corr}, \text{VP}} > 0} \lambda_s^{I, \text{max}} \cdot \text{NPV}_{\lambda, Is}^{\text{corr}, \text{VP}}}_{\text{II}} + \underbrace{\sum_{\text{NPV}_{\lambda, \beta s}^{\text{corr}, \text{VP}} > 0} \lambda_s^{\beta, \text{max}} \cdot \text{NPV}_{\lambda, \beta s}^{\text{corr}, \text{VP}} - \delta \cdot \sum_{\text{NPV}_{\lambda, \beta s}^{\text{corr}, \text{BP}} > 0} \lambda_s^{\beta, \text{max}} \cdot I_0^{\text{BP}} \cdot \text{NPV}_{\lambda, \beta s}^{\text{corr}, \text{BP}}}_{\text{III}} + \underbrace{\sum_{\text{NPV}_{\text{inv}, j}^{\text{VP}} > 0} \text{inv}_j^{\text{max}} \cdot \text{NPV}_{\text{inv}, j}^{\text{VP}} - \delta \cdot \sum_{\text{NPV}_{\text{inv}, j}^{\text{Bas}} > 0} \text{inv}_j^{\text{max}} \cdot I_0^{\text{BP}} \cdot \text{NPV}_{\text{inv}, j}^{\text{PB}}}_{\text{IV}} + \underbrace{\sum_{s=0}^S u_{zs} \cdot (\rho_{s,0}^{\text{VP}} - \delta \cdot I_s^{\text{BP}})}_{\text{V}} + \underbrace{\sum_{s=0}^S \left( \sum_{\gamma=1}^{\Gamma_s^{\text{VP}}} b_{\gamma s}^{\text{VP}} \cdot \pi_{\gamma s}^{\text{VP}} - \delta \cdot \sum_{\gamma=1}^{\Gamma_s^{\text{BP}}} b_{\gamma s}^{\text{BP}} \cdot \pi_{\gamma s}^{\text{BP}} \right)}_{\text{VI}} + \underbrace{\sum_{s=0}^S \left( \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^{H_s^{\text{VP}}} \varphi_{\varepsilon h s}^{\text{max}, \text{VP}} \cdot \zeta_{\varepsilon h s}^{\text{PLL}, \text{VP}} - \delta \cdot \sum_{\varepsilon=1}^{m+n} \sum_{h=1}^{H_s^{\text{BP}}} \varphi_{\varepsilon h s}^{\text{max}, \text{BP}} \cdot \zeta_{\varepsilon h s}^{\text{PLL}, \text{BP}} \right)}_{\text{VII}}$$

$$p_I^{\text{opt}} = \text{NPV of all activity level-independent payments of the investment into product safety (e.g. for its installation, but besides } p_I^{\text{opt}} \text{ )} \quad (\text{I})$$

- + NPV<sup>corr</sup> of operating the profitable safer new processes at their maximum activity levels  $\lambda_s^{I,\max}$  (II)
- + NPV<sup>corr</sup> of the changes between VP and BP regarding the use of the other  $q - 1$  profitable production processes  $\beta$  and the former process  $q$  in the BP (if it was also profitable before the investment) at their maximum activity levels  $\lambda_s^{\beta,\max}$  (III)
- + NPV of the changes between VP and BP regarding the  $\text{inv}_j^{\max}$  realised other financial objects  $j$  (IV)
- + NPV of the changes between VP and BP regarding the valuation of the payments that are independent of activity levels and the investment programme (V)
- + NPV of the changes between VP and BP regarding the monetary equivalents of the production constraints (VI)
- + NPV of the changes between VP and BP regarding the monetary equivalents of the maxed out production intervals  $h$  resulting from product liability (VII)

This price ceiling  $p_1^{\text{opt}}$  for investing into product safety is determined by the (corrected) NPVs of its payments and of the interdependencies resulting from adjusting the optimal investment programme. Under uncertainty, the *discounted payments of all states are included* – even if, in fact, they may not occur.

At first sight, the economic interpretation (22) of the price ceiling resembles the known one from perfect markets. Especially, the (partly corrected) net present values NPV<sup>(corr)</sup>, which were derived from the dual constraints of the two primal problems, represent the equivalent to the ordinary NPVs on perfect markets. Hence, writing the price ceiling as a sum of (partially corrected) net present values allows for an interpretation which may be of particular importance for management accounting and financial planning: Once the optimal solution is known and as long as its structure does not change, one can easily estimate *the monetary consequences (in today's money)* of varying price determinants (e.g. of the expected cost of damages or the insurance premiums). Nonetheless, one has to recognise that on imperfect markets these NPV<sup>(corr)</sup> are *usually not* calculated by discounting with capital market interest rates, but with the correct *endogenous* interest rates of their respective optimisation problem BP or VP (expressing the *individually different* opportunity cost of capital), and that they are corrected for the use of the restricted capacities (e.g. capital budgets, production). Furthermore, on imperfect markets, also the effects of restricted resources/capacities (which would not be considered on perfect markets) are valued in monetary terms as price determinants – i.e. also as (corrected) net present values. Thus, one can see that the maximum payable price for investing into product safety is calculated in a much more complicated way than on perfect markets, but, in the end, may be expressed in a similar way. However, containing the corrections for using restricted capacities and, thus, considering the interdependencies occurring from: (1) the imperfect market conditions and (2) the changes between the situations before and after realising the investment, it gives already an indication that *overcompensations* between the various determinants may be possible. And in fact, this is the reason that under the conditions of imperfect markets one can get to much more complex, even unexpected and undesired, reactions of the maximum payable price on changes (e.g. in the product liability risk) than the straightforward ones on perfect markets. The next section is going to examine them closer.

## Increasing product liability risk and the willingness to invest into product safety

The economic interpretation of the terms (II), (III) and (VII) of (22) demonstrates the effect of product liability on the *price ceiling*  $p_1^{\text{opt}}$  for investments into product safety resulting from

- changes in the expected cost of damages and the necessary insurance premiums and
- the usage of potentially dangerous substances in the liability relevant intervals  $h$ .



They affect  $p_I^{\text{opt}}$  via the  $\text{NPV}^{\text{corr}}$  (19) and (21), as well as term (VII). Thus, the expected economical results seem to be confirmed for single investments because the safer new processes are charged less than the more dangerous old ones (in particular the new ones I less than the former ones q). Nevertheless, sensitivity analysis of the left hand side coefficients of both the BP and the VP shows that a higher liability risk may be *counterproductive for investments into product safety*.  $p_I^{\text{opt}}$  may increase, decline or remain constant. Mathematically, there are three reasons for this:

- Both the rates  $\text{ecd}_{\text{ehs}}$  of the expected costs of damages and the insurance premiums  $\text{ipr}_{\text{ehs}}$  are coefficients for decision variables which are basis or non-basis variables. This may differ between the BP and the VP.
- The optimal solution of the VP considers the one of the BP via the minimum withdrawal constraint.
- In both programmes, negative  $\text{NPV}^{(\text{corr})}$  cannot be part of the optimal solution.

Therefore, (over-) compensation of the effects of higher  $\text{ecd}_{\text{ehs}}$  and/or  $\text{ipr}_{\text{ehs}}$  between the two programmes is possible: while the (positive) terms II of (22) resulting from continuous production with the safer new processes and, consequently, perhaps some of the positive terms VII of (22) are still decreasing, some of the processes contributing to the terms III and VII of (22) may be dispensed with earlier, so that the absolute value of some of the negative terms (III) and (VII) can no longer be diminished. With other words: the optimal solution  $\text{SWW}^{\text{opt}}$  of the BP is no longer equally affected as the one of the VP, so that  $p_I^{\text{opt}}$  may decline.

Consequently, both the mathematical derivation as well as its economic interpretation prove that a higher risk of product liability may lead to the **paradoxical situation** that: 1. it is *unprofitable to invest* into product safety; 2. the *marginal incentive to invest is negative*; and 3. the *expected damages even increase*. Obviously, this finding is of utmost importance for policy makers and courts: In their desire to protect consumers from and compensate them for damages from faulty products, they will have to consider that their decisions and judgements may be counterproductive instead. Hence, they have to carefully look at the individually given situation to prevent a generalised reaction by the manufacturers which, in the end, may lead to less consumer protection – and that at higher cost for the society.

In order to underline the importance of this – perhaps unexpected – outcome for practical decisions, it should be stated that it does not result from employing “just” a linear programming approach but rather from the interdependencies between (constrained) production and investments on imperfect markets. The following example may help to understand this result. To focus on the main outcomes as stated above and to allow for easier reproduction of the calculations, it is kept as simple as possible. Therefore, some of its assumptions may seem not to be very realistic. However, one can still derive similar results on the basis of different quantities, more time periods and a big set of future states to consider uncertainty, other preferences for the withdrawals and additional finance opportunities.

## EXAMPLE – INCREASING PRODUCT LIABILITY RISK AND THE WILLINGNESS TO INVEST INTO PRODUCT SAFETY

Given an imperfect market under certainty with a lending opportunity at the interest rate  $i_L = 50\%$  (investment object  $\text{inv}_L$ ), but without the possibility of borrowing money, a manufacturer with the initial amount of cash  $uz_0 = 50$  [\$] in  $t = 0$  wants to maximise his withdrawals in  $t = 1$ . Interested in selling product  $x_P$ , he needs two resources  $r_1$  and  $r_2$ , i.e. he employs the basic activity  $\underline{\varphi}^{\text{B,old}} = (r_1^{\text{B,old}}, r_2^{\text{B,old}}; x_P^{\text{B,old}}, x_C^{\text{B,old}})' = (4, 5; 8, 10)$ . Unfortunately, one of the product components  $x_C$  tends to be faulty and may cause damages during usage (for reason of simplicity, no other components shall be considered). Therefore, the manufacturer thinks about investing into a modification I which allows for reduction of the potentially dangerous component  $x_C$  by 3 [QU] (quantity units), if input  $r_1$  increases by 1 [QU]. This

leads to the modified basis activity  $\underline{\varphi}^{B,I} = \left( r_1^{B,I}, r_2^{B,I}; x_P^{B,I}, x_C^{B,I} \right)' = (5, 5; 8, 7)'$ . Before and after investing, the process can be operated at the same maximum activity levels  $\lambda^{\text{old,max}} = \lambda^{\text{I,max}} = 10$  and prices  $\underline{p} = (p_{r1}; p_{r2}; p_{xP}; p_{xC})' = (-4; -2; 10; 0)'$ , but for the installation the manufacturer has to spend  $z_{I0} = -50$  [\$] in  $t = 0$ . Hence, performing the basic activities once (i.e.  $\lambda^{\text{old}} = \lambda^{\text{I}} = 1$ ), leads to the following contribution margins CM if no damage occurs:

$$(23) \quad \text{CM}(\lambda^{\text{alt}} = 1) = \underline{p}' \cdot \underline{\varphi}^{B,\text{old}} \cdot 1 = -4 \cdot 4 - 2 \cdot 5 + 10 \cdot 8 + 0 \cdot 10 = 54 \text{ [\$]}$$

$$(24) \quad \text{CM}(\lambda^{\text{I}} = 1) = \underline{p}' \cdot \underline{\varphi}^{B,\text{I}} \cdot 1 = -4 \cdot 5 - 2 \cdot 5 + 10 \cdot 8 + 0 \cdot 7 = 50 \text{ [\$]}$$

With respect to product liability, the manufacturer calculates with the following rates of the expected cost of damages  $\text{ecd}_{xC}$  for both points in time, leading to 3 intervals  $h$  for the partial processes  $\lambda_h^{\text{old}}$  and  $\lambda_h^{\text{I}}$ :

**Table 1: Expected cost of damages and resulting partial activity levels of the old and the modified production.**

<b>h</b>	<b><math>\text{ecd}_{xC,h}</math></b>	<b>For amounts <math>x_C</math></b>	<b>Partial activity level <math>\lambda_h^{\text{old}}</math></b>	<b>Partial activity level <math>\lambda_h^{\text{I}}</math></b>
<b>1</b>	0	$0 \leq x_C \leq 30$	$0 \leq \lambda_1^{\text{old}} \leq \lambda_1^{\text{old},o} = 3$	$0 \leq \lambda_1^{\text{I}} \leq \lambda_1^{\text{I},o} = \frac{30}{7}$
<b>2</b>	1	$30 < x_C \leq 60$	$0 < \lambda_2^{\text{old}} \leq \lambda_2^{\text{old},o} = 3$	$0 < \lambda_2^{\text{I}} \leq \lambda_2^{\text{I},o} = \frac{30}{7}$
<b>3</b>	2	$60 < x_C$	$0 < \lambda_3^{\text{old}} \leq \lambda_3^{\text{old},o} = 4$	$0 < \lambda_3^{\text{I}} \leq \lambda_3^{\text{I},o} = \frac{10}{7}$

As one can see from table 1, the same rates of the expected cost of damages before and after the investment lead to different productions, because the reduction of the potentially dangerous component  $x_C$  allows for higher sales until the same expected damage occurs. Hence, depending on the rates of expected costs of damages  $\text{ecd}_{xC,h} = \text{ecd}_{xC,h0} = \text{ecd}_{xC,h1}$  the optimal solutions  $\text{SWW}^{\text{opt}}$  of the BP and  $p_I^{\text{opt}}$  of the VP result as given in table 2.

**Table 2: Optimal solutions of BP and VP with respect to product liability.**

<b><math>\text{ecd}_{xC,h}</math> (with <math>h = 1; 2; 3</math>)</b>	<b><math>\text{SWW}^{\text{opt}}</math></b>	<b><math>p_I^{\text{opt}}</math></b>	<b>Expected cost of damages <math>\text{ECD}(x_C)</math></b>	
			<b>before investment</b>	<b>after investment</b>
0; 0; 0	1,425	-116 2/3	100	70
0; 1; 2	1,150	-16 2/3	100	70
1/3; 1 1/3; 2 1/3	1,066 2/3	0	100	70
1; 2; 3	900	33 1/3	100	70
2; 3; 4	650	83 1/3	100	70
3; 4; 5	400	133 1/3	100	70
3.4; 4.4; 5.4	300	153 1/3	60	70

4; 5; 6	210	143 1/3	60	70
4.4; 5.4; 6.4	150	96 2/3	30	70
5; 6; 7	105	94 6/7	30	70
5 1/7; 6 1/7; 7 1/7	82 5/7	82 5/7	30	60
5.4; 6.4; 7.4	75	74 2/7	0	60
6; 7; 8	75	14 2/7	0	60
6 1/7; 7 1/7; 8 1/7	75	0	0	30
7; 8; 9	75	-42 6/7	0	30
7 1/7; 8 1/7; 9 1/7	75	-50	0	0
8; 9; 10	75	-50	0	0

As visible from table 2, no or only little risks of product liability do not encourage an investment into product safety: at both points in time, the resulting contribution margin is smaller (50 [\$] instead of 54 [\$]), and the initial amount of cash (and the interest) for implementing the modification is lost. Thus, the maximum payable price  $p_I^{\text{opt}} = -116 \frac{2}{3}$  [\$] for realising the investment is negative, i.e., the manufacturer only invests if someone else pays for this.

As expected, higher liability risks affect the maximum payable price for investing into product safety. Starting from  $\text{ecd}_{\text{xC}} = 0$  [\$/QU], the contribution margins CM of production will decline in both the BP and the VP. Since production with the safer process leads to less expected damages than with the old one, the contribution margin of the old process declines faster – therefore, the *investment becomes more and more profitable*. At  $\text{ecd}_{\text{xC}} = (1/3; 1 \frac{1}{3}; 2 \frac{1}{3})'$  [\$/QU], the investment reaches its break-even point: Now, the investor is even willing to pay for it. Up to  $\text{ecd}_{\text{xC}} = (3.4; 4.4; 5.4)'$  [\$/QU], this *advantage is growing*, so that the investor is able to pay increasing amounts for the investment and still obtains, at the least, the same sum of weighted withdrawals as in the situation without investment.

For  $\text{ecd}_{\text{xC}} > 5.4$  [\$/QU], producing with the old process does no longer cover the expected cost of damages ECD. Hence, for  $\text{ecd}_{\text{xC}} > (3.4; 4.4; 5.4)'$  [\$/QU], the manufacturer will no longer employ the old process in the 3<sup>rd</sup> interval, but just concentrate on the first two intervals. In the VP, however, it is still worthwhile to produce in all 3 intervals, resulting in *greater ECD after investing than before*. Furthermore, since in both programmes the first two partial processes are charged, but the high rate  $\text{ecd}_{\text{xC},3}$  only diminishes the contribution margins CM of production using process I, the *price ceiling*  $p_I^{\text{opt}}$  for the investment into product safety *begins to fall*.

These effects get even stronger for  $\text{ecd}_{\text{xC}} > (4.4; 5.4; 6.4)'$  [\$/QU], because the old process will no longer be profitable in the 2<sup>nd</sup> interval either – until, beyond  $\text{ecd}_{\text{xC}} = (5 \frac{1}{7}; 6 \frac{1}{7}; 7 \frac{1}{7})'$  [\$/QU], employing the safer process becomes disadvantageous in the 3<sup>rd</sup> interval as well. However, with  $\text{ecd}_{\text{xC}} > (5.4; 6.4; 7.4)'$  [\$/QU], it does no longer make any sense at all to produce with old, and the sum of weighted withdrawals remains constant at  $\text{SWW}^{\text{opt}} = 75$  [\$], (still, the initial amount of cash  $uz_0 = 50$  [\$/QU] can be invested into the lending opportunity  $\text{inv}_L$  at  $i_L = 50\%$ ). Hence, only the safer process I may cause damages. Consequently, constant withdrawals in the situation without investment, but decreasing CMs in the situation afterwards, cause  $p_I^{\text{opt}}$  to *continue to decline*.

Finally,  $\text{ecd}_{\text{xC}} > (6 \frac{1}{7}; 7 \frac{1}{7}; 8 \frac{1}{7})'$  [\$/QU] lets the investment even lose its profitability: though employing process I is still worthwhile because the CMs are still positive, they do not cover the activity level-independent

payments  $z_{I,0} = -50$  [\$] for (un)installing the processes in  $t = 0$ . If finally  $\underline{ecd}_{xC} > (7 \frac{1}{7}; 8 \frac{1}{7}; 9 \frac{1}{7})' [\$ / QU]$ , there will not be any production in the VP either. For this reason, the manufacturer *will lose*  $z_{I,0} = -50$  [\$] overall..

Nevertheless, though higher product liability risks in this example may lead to an investment into product safety becoming unprofitable, it could be argued that safety sometimes costs money. But even this *argument does not hold*: Starting at  $\underline{ecd}_{xC} = (3.4; 4.4; 5.4)' [\$ / QU]$ , higher rates of expected costs of damages lead to higher expected damages (cp upper light shading in table 2), and for  $(6 \frac{1}{7}; 7 \frac{1}{7}; 8 \frac{1}{7})' [\$ / QU] < \underline{ecd}_{xC} < (7 \frac{1}{7}; 8 \frac{1}{7}; 9 \frac{1}{7})' [\$ / QU]$ , investing into product safety results in a *negative outcome not only in terms of profitability, but also regarding the expected damages* (cp. dark shading in table 2). Taking into account that table 2 furnishes information on the maximum price payable for the investment, the actual price to pay will normally be greater than 0 [\$] (the difference between the price ceiling and the actual price leads to the actual profitability of the investment), this dark shaded area of negative outcome for both the investment's profitability and the level of expected damages will be even larger.

## CONCLUSION

After a short introduction into product liability risks, this paper offered a general approach to assess investments into product safety with particular regard to the effects of product liability. Since such investments affect production, the payments required for a financial valuation have to be derived from production planning. Product liability modifies the contribution margins and the constraint system. At this stage it becomes visible, that strict liability may be understood as a borderline case of negligence liability.

To assess investments into product safety, the model considers activity level-dependent and -independent payments as well as uncertainty and handles the investment's indivisibility in two steps. Applying duality theory allows for identifying and quantifying the determinants of the price ceiling for such an investment. This maximum payable price can be interpreted as a sum of (sometimes *corrected*) *net present values*; information on probabilities, means and variances is not required. Surprisingly, if more than one partial process  $h$  of a process  $\beta$  is chosen, then *all* these partial processes have the *same* nonnegative corrected net present value, which is also the one of the whole process  $\beta$ . (Thus, the corrected net present values of the partial processes are *not value additive*.) Furthermore, using sensitivity analysis, it is possible to demonstrate that a higher product liability risk does not always encourage investments into product safety. In particular cases, it may even lead to the paradoxical situation that: 1. it is unprofitable to invest into product safety; 2. the marginal incentive to invest is *negative*; and 3. *the expected damages even increase*.

Obviously, this finding is of utmost importance for policy makers and courts: In their desire to protect consumers from and to compensate them for damages resulting from faulty products, they will have to consider that, instead, their decisions and judgements may be counterproductive for increased consumer protection. Hence, they have to carefully look at the individually given situation to prevent a generalised reaction by the manufacturers which, in the end, may lead to less consumer protection – and that at even higher cost for the society.

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## ENDNOTES

- <sup>1</sup> The author thanks Peter Kurz for comments on a prior version of this paper and South Africa's National Research Foundation for funding for rated researchers.
- <sup>2</sup> While in the following decision trees will be used to model uncertain future, the probability of a damage in a particular state (depending on the level of precaution) is considered via ECD in this state.
- <sup>3</sup> In many cases, markets containing real investments are not complete. Short selling of (installed) machines or production lines is generally not possible. Also, the underlying asset (i.e. the investment) is normally neither divisible (it is realised as a whole or not at all) nor traded continuously, nor following a distinct (stochastic) price process. Additionally, the effects of technology investments and the consequences of interdependencies on the entire production are individually different. Thus, both alternatives – the construction of a replicating portfolio with production plants as well as finding a twin asset that is perfectly correlated with the underlying – are likely to fail. However, in case their underlying assumptions are fulfilled, certain discrete option pricing models, such as the binomial model of Cox, Ross & Rubinstein (1979) and Rendleman & Bartter (1979) (and therefore several real options based approaches), result as specifications of the presented model (Klingelhöfer 2006, pp. 76–77).
- <sup>4</sup> If one interprets a product formally as a *bundle of its components*, differences in its composition result from varying quantities of its components (Klingelhöfer, 2000, pp. 232-246, 426-430, generalising an idea of Souren, 1996). With respect to product liability, this allows to look at the potentially dangerous components in a product as well as at the (total) quantity in the potentially dangerous products in the market.
- <sup>5</sup> Also an input can be interpreted as a bundle of its components. In particular the explanation in the text becomes understandable, if input and output are defined via their mass balances (e.g. in medicine or recipes). However, in a more general way, the explanations in the text also cover diverging dimensions of objects and components as they may be found in bills of materials (Klingelhöfer, 2000, pp. 236-240).
- <sup>6</sup> This implies that the insurance premiums depend on the quantities  $\varphi_{\text{EH}}$  of the potentially dangerous substances in the relevant intervals  $h$ . Otherwise they can be seen as fix costs, independent from the production programme.
- <sup>7</sup> Compare analogously Klingelhöfer (2000, pp. 503-508). In particular with respect to object components, opportunity cost may result from the substitution of a potentially dangerous substance by a safer one.
- <sup>8</sup> Cp. for the following analogously Klingelhöfer (2006), pp. 271-277 (together with pp. 71-91); (2013), pp. 15-16 and further Hering (2017), pp. 150-164, 276-279, for decisions under risk Laux (1971), pp. 46 ff. These weights  $w_s$  need not sum up to 1. They are just a measure for individual preference and not necessarily expressing probabilities. Thus, although similar at first sight, SWW is normally not an expected value.
- <sup>9</sup> For reason of simplicity  $\text{ECD}_s$  shall be assumed as a monotonously increasing and convex function of  $\varphi_{\text{ES}}$  (i.e.  $\text{ecd}_{\text{EHs}} \geq 0$  does not decrease with growing  $\varphi_{\text{ES}}$ ), so that special order conditions for the intervals  $h$  are not necessary.

Otherwise they can be integrated analogously to Klingelhöfer (2000), pp. 427-438. Indexing of  $\text{ecd}_{\varepsilon h s}$  with  $\beta$  for the processes is not necessary, because a damage usually results from the products, irrespectively in which process they have been manufactured. However,  $\text{ecd}_{\varepsilon h s}$  (and the subdivision into intervals  $h$  of partial amounts) can differ with the states  $s$ .

- <sup>10</sup> The following  $\text{NPV}^{(\text{corr})}$  can be derived from both the BP (17) and the VP (18). However, the dual variables and, consequently, the factors  $\rho_{s,0} = l_s/l_0$  are normally not the same. Especially, in case of an existing finite positive solution  $p_I > 0$  of both the primal and dual VP, one can deduce  $l_0 = 1$  and, therefore,  $\rho_{s,0} = l_s$  from the complementary slackness condition  $p_I \cdot (1 - l_0) = 0$  for *all* the (corrected) NPVs derived from the VP.
- <sup>11</sup> The dual variables  $\zeta_s^\beta$  and  $\xi_j$  on the right hand side of (19) and (20) can only be positive, if (17) d resp. e in case of the BP or (18) d resp. e in case of the VP are fulfilled as equations. Since for positive activity levels  $\lambda_s^\beta = \sum_{h=1}^{H_s} \lambda_{hs}^\beta$  and realisations  $\text{inv}_j$  of the financial objects the corresponding dual restriction – and, therefore, (19) resp. (20) – becomes an equation, the (corrected) NPV of maximum production employing process  $\beta$  / realisation of a financial object  $j$  is positive (0 in case of degeneration). Equally, it is 0 for (the only partially chosen) boundary productions / financial objects and even negative for non-realised processes/objects (0 in case of degeneration).
- <sup>12</sup> As explained in endnote **Error! Bookmark not defined.**  $l_0 = 1$  in the VP, but not necessarily in the BP. Hence, to substitute the dual variables of the BP by the corresponding  $\text{NPV}^{(\text{corr})}$ , the latter have to be multiplied by  $l_0^{\text{BP}}$ .
- <sup>13</sup> The dual variable  $\delta$  of the withdrawal constraint calculates the value of a marginal increase in  $\text{SWW}^{\text{opt}}$  referring to the objective function of the VP (the price ceiling).

# **KGHM – INTERNATIONALIZATION BY FDI: FROM POLISH COMMUNIST STATE OWNED FIRM TO MULTINATIONAL CORPORATION**

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## **ABSTRACT**

*Case studies can be used in all types of research: exploratory, descriptive or explanatory” (Bonoma 1985; Ghauri and Gronhaug 2002; Yin 1994). Indeed, in this very challenging case we have undertaken exploratory, descriptive and explanatory research in an effort to develop a pedagogical instrument to understand SOE strategies from emerging markets. The case study demonstrates the difficulties of internationalization and restructuring by corporations from former socialist countries in emerging and mature markets, using a strategy of geographic diversification via acquisition in other emerging as well as developed markets. We posit that the lack of FDI experience, including the lack of knowledge in risk management well-known to Western managers, contributed to current KGHM difficulties in managing its mines abroad.*

**Keywords:** internationalization, FDI, SOEs, Poland, copper mining.

This case was prepared on the basis of published documents. It is intended to be used as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

## **BACKGROUND – COPPER IN HISTORY**

Archaeological evidence demonstrates that copper was one of the first metals used by humans and was used at least 10,000 years ago for items such as coins and ornaments in western Asia. And copper pendants were discovered in what is now northern Iraq dating to 8700 BC.

Copper has a history of 60 centuries and can be characterized as the indispensable metal for the human condition. It is mentioned in the Bible (Deuteronomy) « A land whose stones are iron and from whose mountains you will mine copper ».

Israel's Timna Valley provided copper to the Pharaohs (an Egyptian papyrus records the use of copper to treat infections and to sterilize water). The Egyptians had so many uses of copper that they used the ankh symbol to denote copper in their system of hieroglyphs. Copper also represented eternal life in their culture.

Cyprus supplied much of the Phoenician, Greek and Roman needs for copper in ancient times. "Copper" is derived from the latin *Cyprium*, literally Cyprian metal. The Greeks of Aristotle's era were familiar with brass as a



valued copper alloy. In South America, the pre-Columbian Maya, Aztec and Inca civilizations exploited copper, in addition to gold and silver. During the Middle Ages, copper and bronze works flourished in China, India and Japan.

Why is copper so indispensable to the human condition?

As the ICGS tells us, “copper is a malleable and ductile metallic element that is an excellent conductor of heat and electricity as well as being corrosion resistant and antimicrobial. It can be found in a variety of forms in the earth’s crust”.

As Webster Smith noted in his landmark study, *60 Centuries of Copper*, “the story of copper and its principal alloys, bronze and brass, is virtually a chronicle of human endeavor since man emerged from the Stone Age. [60 centuries of Copper].

The discoveries and inventions relating to electricity and magnetism of the late 18th and early 19th centuries by scientists such as Ampere, Faraday and Ohm, and the products manufactured from copper, helped launch the Industrial Revolution and propel copper into a new era.

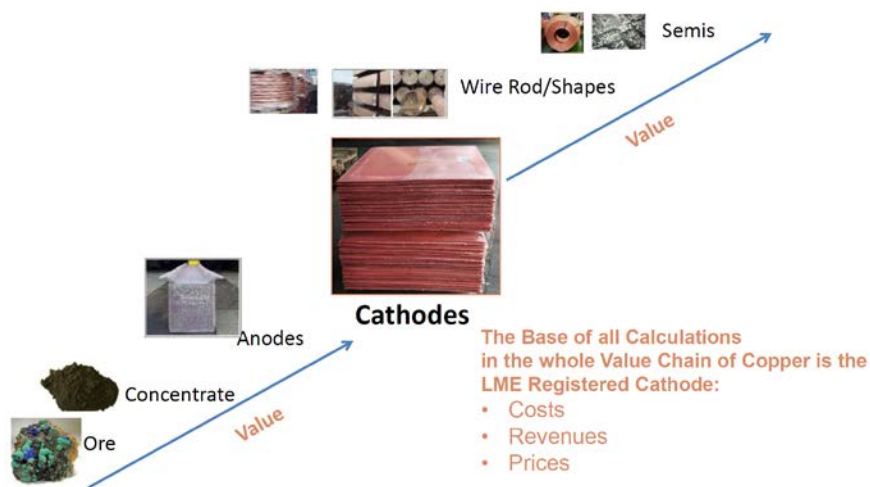
Copper became the very foundation and condition of possibility of the electrical and communications infrastructure in the modern industrial economy. It is difficult to imagine any modern industrial economy without copper given contemporary society’s complete dependence on electricity as the energy that fuels and supports virtually every electrical motor from heating furnaces to air conditioners to appliances large and small and every lighting system in every home and business and of course every computing and communications system in every business and home everywhere.

## THE COPPER VALUE CHAIN

Copper discovery, extraction, smelting and refining is a subset of the global mining value chain. However, when we “drill” deeper into the copper industry, it is more revealing for we learn there are several distinct stages from copper discovery and extraction to smelting to refining to the production of intermediate industrial products such as wire or rods or ingots or sheets and ultimately copper end products such as plumbing parts and electrical conductors.

Copper is further transformed by downstream industries into alloys and copper end products used by automobiles, electronics, appliances, residential and office and commercial building construction, telecommunications, power generation and numerous other industries. The following graphics clearly shows the different stages in the copper value chain.

**Figure 1: The Value Chain of Copper – Where to Start (Langner).**



Copper is mined most commonly in large open pit mines extracting ore with less than 1% copper that is broken down by giant crushing machines that reduce boulders to rocks the size of golf balls. Then using multiple processes of chemicals and heat, the copper concentrate copper is raised from 24% to 40% in order to then smelt it and subsequently refine it to intermediate and final products.

## **COPPER PRODUCERS**

As revealed in Appendices 8, 9 and 10, copper is mostly produced in a small handful of countries with Chile dominating as the largest country producer. Moreover, the industry is oligopolistic concentrated in the top 10 producers who produce the vast majority of world supply of finished copper.

They are:

- Codelco (Chile)
- Freeport-McMoran (USA)
- BHP Billiton (Australia)
- Glencore (Switzerland)
- Southern Copper (Mexico and Peru)
- KGHM (Poland)
- Antofagasta (Chile)
- First Quantum (Canada)
- Rio Tinto (UK-Australia)
- Vale (Brazil)

## **COPPER MARKET SUPPLY AND DEMAND DYNAMICS**

One of the main characteristics of the copper market is that, while the world's largest consuming country is China, copper is predominantly produced in Latin America. Accounting for 40% of global copper consumption, China is the largest importer of copper and consequently has a disproportionate impact on copper prices.

China was a major contributor to the global copper slowdown from 2011-2017 due to the unique characteristics of the Chinese market. It has been observed that there is a strong correlation between Chinese GDP growth and copper consumption. Consequently, the decrease in the Chinese GDP growth rate resulted in a decline in demand for copper and hence a decline in copper prices.

## **KGHM's HISTORY AND OVERVIEW**

KGHM was founded in communist times only a few short years after the USSR imposed communism on Poland and other countries in Central and East Europe upon an agreement between President Roosevelt to Stalin at the February 1945 Yalta (Crimea) Conference 60 days before Roosevelt's death.

According to research by Professor Wasowski ("State controlled multinationals from transition economies: evidence from Poland", Chapter 2 in *Internationalization of Firms from Economies in Transition* ed M.T.T. Thai and E. Turkina, p. 25), a team of Polish geologists discovered significant copper deposits in the mid- 1950s near Lubin and Polkowice in the Lower Silesian Voivodeship in south western Poland. As one company manager told the professor during his research, they did not undertake any economic or cost-benefit analyses at the time, which was fortunate for the future company, as the primitive technology available to the firm at the time ensured it was a high cost firm and a cost benefit analysis would have ensured the project was not undertaken.

The Government of Poland Minister of Heavy Industry established the state owned enterprise in 1959 called “Lubin Mine under construction” which was renamed “Copper Mining and Smelting Industrial Complex” or KGHM.

On 1st May 1961 the enterprise named "Lubin w budowie" ["Lubin under construction"] was transformed into The Copper Mining-Smelting Combine in Lubin [Kombinat Gorniczo-Hutniczy Miedzi w Lubinie]. The aim of this combine was a construction of mines, ore dressing plants, steelworks and auxiliary buildings.

Throughout communist times, this firm – as with firms across the COMECON/Warsaw Pact countries - served the demands of other firms and member countries. COMECON or the Council for Mutual Economic Assistance, was the coordinating organization under the leadership of the USSR to coordinate economic planning, trade and R & D amongst the Soviet bloc countries. It was created as a response to the US Marshall Plan to rebuild post-war Western Europe. The Warsaw Pact was a treaty amongst the Soviet bloc countries as the Soviet counterpart to NATO, the western security alliance.

In centrally planned economies, efficiency and profit making were not major considerations as the means of production had been seized and nationalized by the USSR and each country in the Soviet bloc. Restated, private for profit corporations did not exist in the Soviet system. Capital markets and stock exchanges did not exist. Meeting production quotas set by the central planners was the key to success for Soviet managers in state owned enterprises.

## Solidarnosc

This all changed in 1989 with the collapse of the Berlin Wall that separated West Berlin from communist east Berlin and the subsequent collapse of communist governments in Central and Eastern European countries. Although the breaking point was the collapse of the Berlin Wall in October 1989, during the 1980s, the Polish people frequently rebelled with strikes against the Polish Communist Government that shook Central and Eastern Europe. Following political, social and economic pressures orchestrated by Solidarity, the Communist authorities in an unprecedented gesture, accepted the idea of the elections and power sharing with the opposition. The new Government undertook the difficult task of radically transforming the political and economic systems.

The changes in Poland represented a clear victory in its 45-year confrontation with the Soviet system. It was a victory of decentralized economic decision making system over the centrally planned, autocratic system based on power without popular support or legitimacy. However, it is not really possible to fully understand the collapse of communism and the Soviet Union without understanding the critical role of Poland in challenging Soviet hegemony from 1947 until 1989 when the Berlin Wall came down. And it is not fully possible to understand these developments in Poland without understanding the central role played by the workers’ union, *Soldarnosc*.

([https://www.washingtonpost.com/archive/politics/1979/06/03/polish-throngs-hail-pope/841509c0-f79d-4673-b40e-93e704777353/?utm\\_term=.70b6fa3c86ef](https://www.washingtonpost.com/archive/politics/1979/06/03/polish-throngs-hail-pope/841509c0-f79d-4673-b40e-93e704777353/?utm_term=.70b6fa3c86ef)).

In the subsequent years throughout the 1980s – strongly publicly supported by US President Ronald Reagan and British Prime Minister Margaret Thatcher in addition to continuing support from Pope John Paul II – *Solidarnosc* evolved from a traditional trade union to a social movement according to Professor Kramer. Indeed, it became the de facto political opposition long before it became a formal political party at the end of the decade. These successes of the trade union movement had profound consequences for the development of KGHM in the post-communist era.

## The Company

In 1989, KGHM had 50,000 employees of whom only half actually worked in the core business of copper production (Wasowski). The firm was not cost effective and after the collapse of state central planning in Poland, now had to face more efficient Western competitors.

In 1991, the Government of Poland restructured KGHM (and many other Polish SOEs) into a state-owned joint stock company to prepare it for privatization. In 1992, the Government announced the privatization of KGHM offering 51% of the shares to an American investor. However the KGHM trade unions organized a strike supported by 37,000 workers or 95% of the KGHM unionized workforce “in defense of national property”. The Government of Poland backed down, cancelled the privatization and granted the miners a pay increase.

In 1997, the Government of Poland listed KGHM on the Warsaw Stock Exchange as the largest IPO up to that time. However, the government retained a controlling interest of 42% of the shares. In 2000, it announced a plan to sell off the remaining shares in KGHM and again the unions successfully protested. In 2010, the Government successfully reduced its share in KGHM from 42% to 31%. By this time, KGHM had become one of Poland’s largest firms with revenues of 4.5 Billion Euros and was one of the top 10 copper producers in the world.

## **KGHM’s Acquisition of the Canadian Company Quadra FNX**

In 2009, KGHM announced a 10-year plan to increase production and productivity and to reduce its high cost structure. To implement the plan, KGHM bid on and acquired the Canadian firm Quadra FNX for \$2.9 Billion CDN (\$2.2 Billion USD, about 9 Billion Polish PLNs). Quadra was a middle tier copper producer operating 6 mines in Canada, USA and Chile. The acquired Canadian company was listed on the Toronto Stock Exchange (although the new owner subsequently delisted it).

This was the largest ever foreign acquisition by a Polish company and a most unusual one for normally firms from Western developed countries acquired firms in emerging markets rather than the other way around.

It was also an extremely audacious move on the part of KGHM management as, up to that point in time, the company was mostly an exporter from the Polish located copper mines without seasoned experience in managing foreign direct investment.

At the time of the purchase (2011), the KGHM operating profit margin, most from the Polish mines, was about 50% thanks to the high world prices for copper, while the cash-flow amounted to approximately 13 billion PLN (4.2 billion US dollars), (Polish Government Audit Office, 2018).

However, from an economic point of view, the timing was most unfortunate for very soon thereafter, the price of copper collapsed for the next 6 years. At the time of the acquisition, three-month copper prices were nearing US \$10,000 per ton, on the London Metal Exchange (LME), while at the end of 2016, LME copper prices were around US\$5,500 per ton. This significant decline in price per metric ton was especially hard on a high cost producer such as KGHM. See Appendix 1.

## **KGHM Mines**

Polish copper deposits - one of the biggest in the world - are exploited by three underground mines: "Lubin", "Polkowice-Sieroszowice" and "Rudna". The extracted material is enriched in the Concentrator Plant, while the production of copper, silver, gold, lead and other metals takes place in smelters: "Głogów", "Legnica" and "Cedynia". See Appendix 5.

In the Americas, KGHM owns mines Robinson, Carlota (USA) McCreedy West, Morrison (Canada) and Franke and Sierra Gorda (Chile). Apart from copper, KGHM SA mines and produces silver, molybdenum, nickel, gold, palladium and platinum. Thanks to the friendly take-over of Quadra FNX (today known as KGHM International) KGHM SA became a global company with an internationally recognized brand. One of its final products is cathodes listed on the London and Shanghai Exchanges while the refined silver certificates are listed on the London, New York and Dubai Exchanges.

To summarize, KGHM extracts and processes natural resources focusing especially on copper and silver. The company possesses a geographically diversified portfolio of mining projects. It owns mines, production plants and smelters on three continents - in Europe, South and North America.

## Recent Developments

In the period following the acquisition of the Canadian firm Quadra FNX, the environment came increasingly to the fore. International NGOs such as Greenpeace, have increasingly focused on mining practices demanding more exacting and expensive mitigation. On a parallel track, countries have become increasingly concerned with GHG emissions. In 2015, 177 countries – including Poland - met in Paris and agreed to the Paris Climate Accord to limit the production of greenhouse gases. Poland signed the Accord acknowledging its 1.06% share of global GHG and announced its promise to reduce GHG would take effect commencing November 6, 2016.

However, a momentous event occurred within Poland that signaled changes for KGHM in addition to the entire country. National Parliamentary elections took place on Oct. 25, 2016 to both the *Sejm* (roughly equivalent to the US House of Representatives) and the Polish Senate. The conservative Law and Justice Party won a clear majority for the first time since democracy was established after the fall of communism. This party is grounded in economic nationalism including a strong belief in economic interventionism.

Due to the unsatisfactory financial performance resulting in the substantial loss of revenue for the State Treasury over the three-year period, the KGHM Board of Directors replaced the CEOs and CFOs three times.

Indeed, one year after coming to power, the new government asked the Polish Government Audit Office (NIK) to investigate KGHM's acquisition of the Canadian firm Quadra FNX, to determine if it was justified.

In February 2017, KGHM announced it was writing down \$1.24 Billion in assets in the Sierra Gorda mine in Chile, blaming the decision on the dramatic decline in copper prices. This was followed by an announcement on May 8, 2017 that the second phase of the mine at Sierra Gorda, Chile had been cancelled. The Sierra Gorda project in Chile's Atacama Desert mining belt in 2011 had been purchased by the Canadian firm Quadra in a joint venture with Japan's Sumitomo Metal Mining Company and Sumitomo Corp (55% Canadian share and 45% Japanese share).

The shipments from the Chilean project began in 2014 after KGHM had acquired Quadra and after substantial cost over-runs in the development of the project. When asked if the phase two expansion would be revisited in the future, KGHM CEO Domagalski-Labedzki said: "There is no such possibility." (Fast Markets) This news did not surprise investors as the asset write-offs related to the Chilean operation had a negative impact on KGHM's bottom line, pushing its financial results into the red in both 2015 and 2016.

According to Chile's statistics, in 2016 the Sierra Gorda project produced around 98,000 tons of copper while the initially projected production for 2018/19, before the decision to abandon completion of the second phase development, was 220,000 tons of copper per year. On July 30, 2017, KGHM CEO Domagalski-Labedzki stated that the Chilean copper mine in Sierra Gorda could be profitable in three-four years.

The financial results for 2017 amounted to a profit of 1.23 billion PLN, approximately 304 million US\$ (vs 4.08 billion PLN loss in 2016, approximately 1 billion US\$). The disappointing financial results and operational difficulties led to the dismissal of the CEO and his Deputy on March 10, 2018.

In June 2018, the controlling shareholder (Poland State Treasury) appointed 6 out of 10 new members of the Supervisory Board as well as a new CEO, Mr. Chludzinski and two Deputies, CFO and COO. The positions in the Supervisory Boards and /or CEO's, CFO's etc. are highly sought after, primarily because of the very attractive level of compensation. They are considered "patronage appointments" or compensation for political activism in favour of a party in power. Since the Law and Justice Party (PiS) electoral victory, the new Government replaced the existing

Boards and Managers in the state majority owned companies, often without regard to the candidates' qualifications for the position.

The new Board decided to transfer all profits to the Capital Reserve Account and confirmed that No dividends will be declared or distributed in 2018.

## LESSONS LEARNED AND MANAGERIAL IMPLICATIONS

*If you don't want to get wet, you had better buy an umbrella before it starts to rain. It is in times of such stormy weather when it pays to have been prudent while the sun was shining.*

- *Andrés Velasco, Finance Minister, Government of Chile*

At the beginning of 2019, the Government of Poland's Audit Office issued a very critical preliminary report on KGHM's decision to acquire Quadra FNX Mining, the majority owner (55%) of the Chilean Sierra Gorda mining operations. It also criticized the company's management production and financial forecast. More specifically:

- The projected volume of 110,000 tons daily ore processing by 2014 (Phase 1 of the project) was never met;
- As a result of the above, the copper and molybdenum output was lower than projected, directly impacting the revenues (ex. for the first 6 months of 2018, the projected revenues were US \$6.5 billion; US\$ 2.4 billion effectively achieved);
- The projected investments necessary to start the Sierra Gorda exploitation (SG operation) was estimated during Phase 1 at US\$ 2.9 billion. The real costs were 50% higher;
- Production began one year later than initially forecast;
- According to the Audit Office, the company managing the project on behalf of KGHM submitted the production and cost-related estimates which were never independently verified by KGHM or other specialized consultants;
- Some of the estimates included obvious errors and/or omissions (ex. costs related to supply and transportation of crucial equipment);
- The Audit Office pointed out that the valuation of Quadra's FNX assets related to Sierra Gorda was decided in an unprofessional manner. It did not take into consideration production and technological risks. Had the management done the risk analysis, Sierra Gorda valuation would have been much lower. Thus, the Quadra's FNX acquisition may not have happened.
- In addition, the purchase price (9 billion PLN, 2.2 billion US\$) was above 5 billion PLN or 1.2 billion US\$, the amount determined by KGHM and McKinsey & Company as the most appropriate in implementing mergers and acquisitions strategy;
- The Audit Office also pointed out that the decision to acquire the Canadian company was taken at a time of very favourable world prices for copper and molybdenum. The KGHM generating profit margin in 2011 was around 50%. The company had 13 billion PLN (3.2 billion US\$) in cash-flow at its disposal.

To summarize, we posit that the main source of current KGHM difficulties is due to several factors, some of them could be considered as uncontrollable, such as a substantial decrease in world prices for copper and molybdenum, and others that originate in errors made by company management.

We posit that the KGHM managers who knew Polish operations inside out and ran it successfully lacked the experience in areas such as risk assessment, risk management, cost control systems, and sensitivity analysis. As a result, the due diligence required in a case of such a substantial investment in foreign environments, like South America, was either completely lacking or very deficient. The lack of experience of Polish managers in dealing with FDIs has been due to the socialist planned economy which put them at a decided disadvantage with their Western managers.

In hindsight, there was a better way to achieve KGHM's objectives to internationalize and get access to additional sources of raw materials while minimizing the risks taken. For example, a substantial purchase of Canada's Quandra FXN company shares on the Toronto Stock Exchange would have given a seat on Quandra's Board of Directors and allowed an access to a learning process in managing FDI's operations in South and North America.

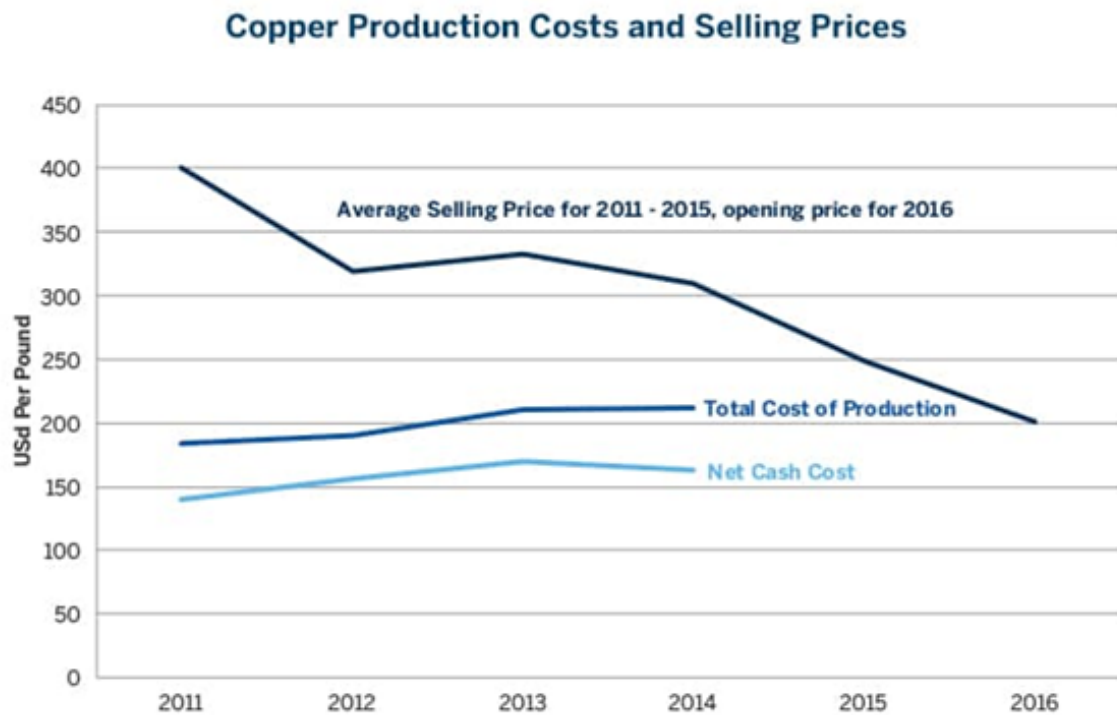
This case also illustrates that theoretical models and concepts developed by academics are often useful and relevant to the business community and decision-makers in public and private sectors. Had the KGHM top management and/or Board of Directors and/or Supervisory Board been knowledgeable about international foreign direct investment theory and/or models as analyzed by Aharoni (1966), Vernon (1966), Wells (1976, 1983), and Johanson and Vahlne (1977, 2009), to mention just a few well-known management authors, they would have most probably taken a somewhat different approach.

## QUESTIONS

1. Do you agree with the criticisms of the Audit Office of the government of Poland concerning KGHM's decision to acquire the Canadian firm in 2010 and their subsequent management of the acquisition? Why? Why Not?
2. Considering the challenging market conditions, what other courses of action would you recommend? Divest? Attempt to sell Chilean operation to the Japanese partners and/or other potential partners?
3. Was the friendly takeover of the Canadian Quadra Company the right way to internationalize KGHM? Why?
4. Were external factors such as the sudden decline in the price of copper and the election of a more interventionist government to blame for the problems at KGHM or should/could they have been foreseen?
5. Can a private for profit competitive firm – with controlling interest by a government – make strategic decisions similar to a privately owned firm?
6. Should KGHM focus only on copper and silver when the dominant strategy for a mining company is to extract and refine most of the precious metals found including gold?

## APPENDICES

### APPENDIX 1: WORLD COPPER PRICES, 2011-2015



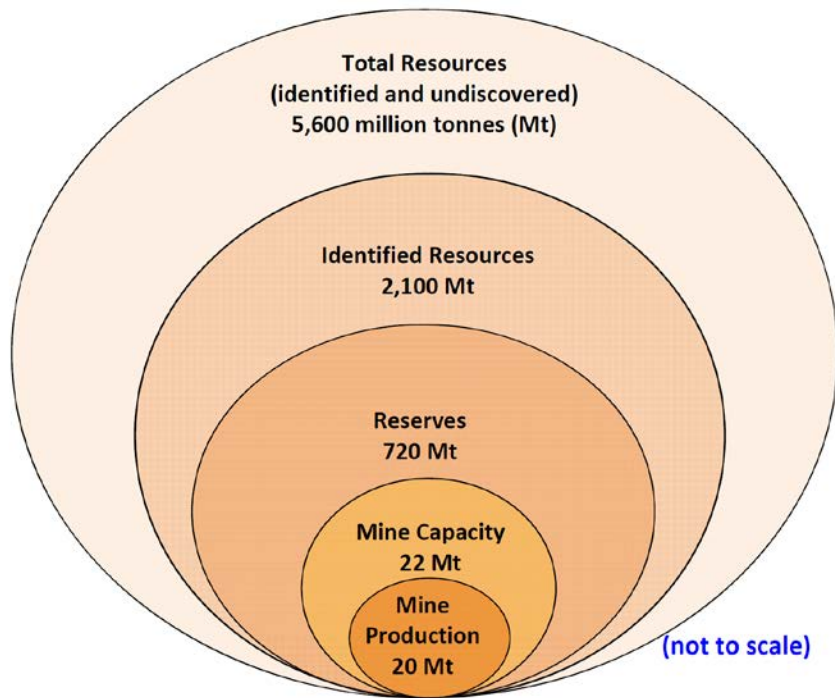
Source: GFMS Copper Survey 2013 and 2015, Bloomberg Professional (HG1),  
CME Group Economic Research Calculations



## APPENDIX 2: WORLD COPPER RESOURCES, 2016

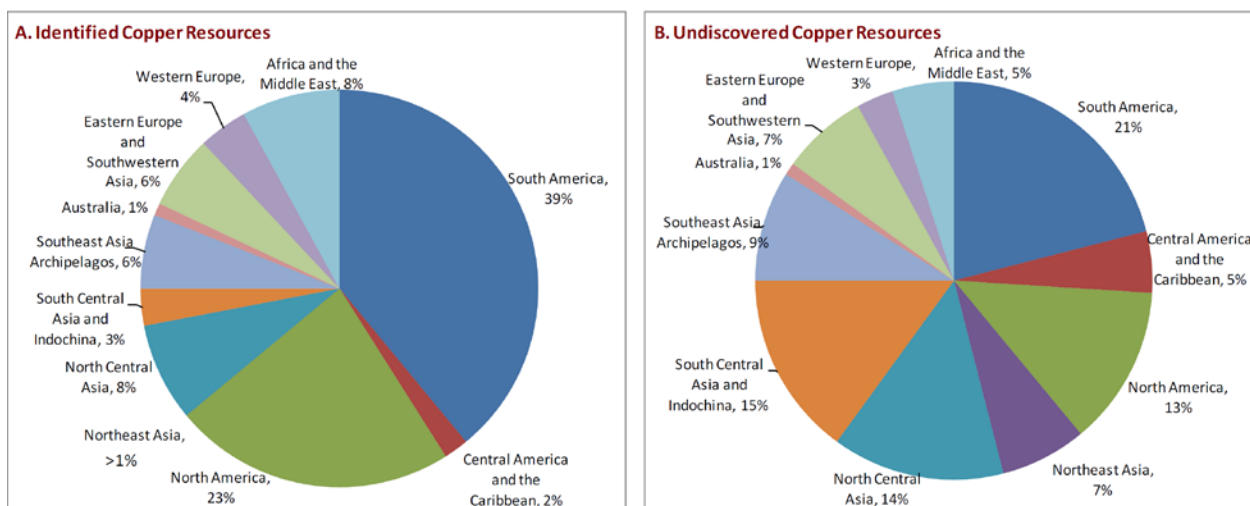
### 2016 World Copper Reserves & Mine Production <sup>1/</sup>

(undiscovered resources not including deep sea nodules and land-based and submarine massive sulfides - contained copper)



1/ Source: USGS (resources/reserves data) and ICSG (capacity/production data)

## APPENDIX 3: IDENTIFIED AND UNDISCOVERED COPPER RESOURCES, 2014

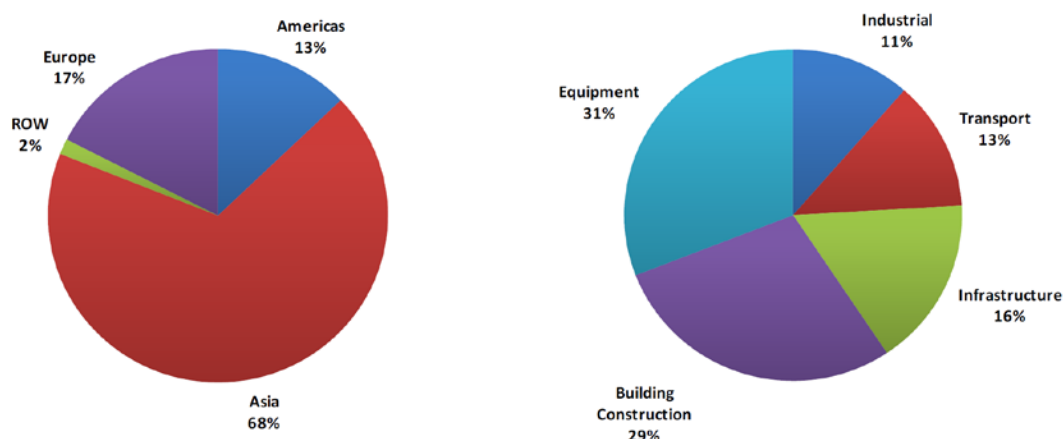


1/ Undiscovered Copper Resources - A Global Assessment, April 2014, Presentation at ICSG meeting, Lisbon, by Mrs Jane M. Hammarstrom (USGS Global Mineral Resource Assessment Team)  
 2/ Supporting studies, including documentation of the assessment methodology and descriptions of individual tracts, are available on the USGS Mineral Resources Program Web site, at <http://minerals.usgs.gov/global/>.

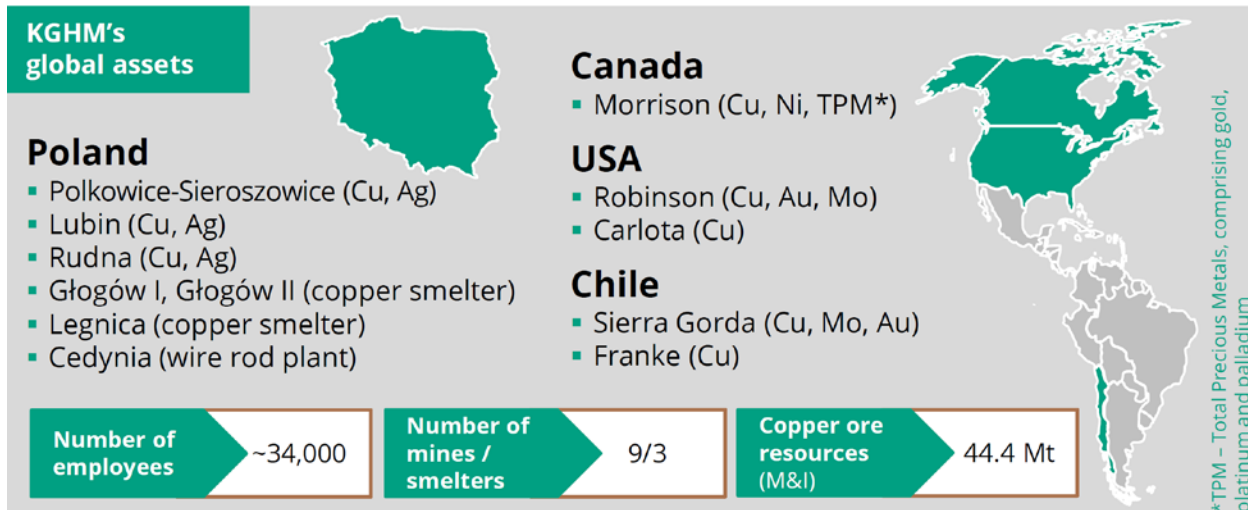
## APPENDIX 4: MAJOR USES OF COPPER, 2016

### Major Uses of Copper: Usage by Region and End Use Sector, 2016

Source: International Wrought Copper Council (IWCC) and International Copper Association (ICA)



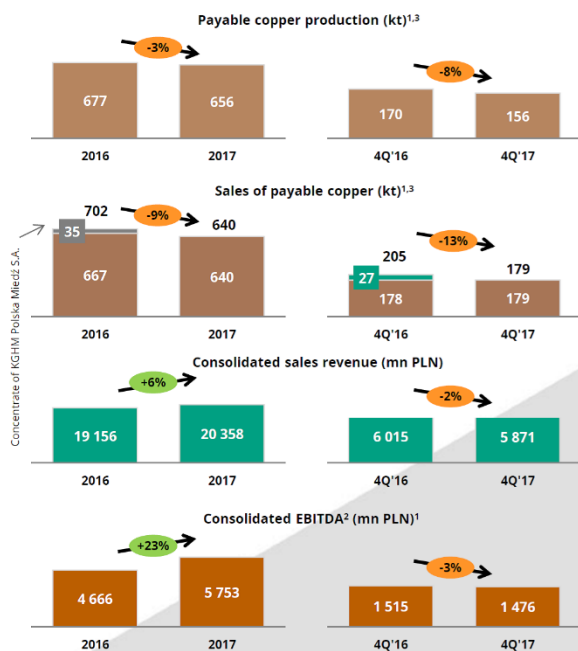
## APPENDIX 5: KGHM's Global Assets



## APPENDIX 6: KGHM Financial Summary, 2017

### Summary of the year 2017 in the KGHM Polska Miedź S.A. Group

#### Production, sales and finance



- Production:** A decrease in payable copper production by 3% in 2017, alongside 8% lower production in Q4 yoy, mainly due to the breakdown-related shutdown at the Głogów Smelter/Refinery.
- Sales:** Full-year sales of payable copper lower by 9%, of which the difference in the fourth quarter, compared to the same prior-year period (-13% yoy), was due to the lack of sales by KGHM Polska Miedź S.A. of own copper concentrate, which was a one-off in 2016.
- Sales revenue:** An increase by 6% for the year, while the 2% lower fourth quarter sales yoy reflect the aforementioned decrease in sales volume, which was partially offset, mainly by higher copper prices by over 1500 USD/t (+29% yoy), alongside a weakening in the USD/PLN exchange rate by 11% yoy.
- EBITDA:** Adjusted EBITDA for 2017 increased by 23%, while in the fourth quarter it was lower by 3% yoy due to the decrease in EBITDA of KGHM Polska Miedź S.A. by 17%, alongside a 3.5-times higher result of Sierra Gorda and a 14% increase in EBITDA of KGHM International.

5

<sup>1</sup> Comprises the segments KGHM Polska Miedź S.A., KGHM International and Sierra Gorda (55%)

<sup>2</sup> Adjusted EBITDA = EBITDA (profit/loss) on sales + depreciation/amortisation) adjusted by impairment losses on non-current assets

<sup>3</sup> Comprises sales of own concentrate by KGHM Polska Miedź S.A. in 2016



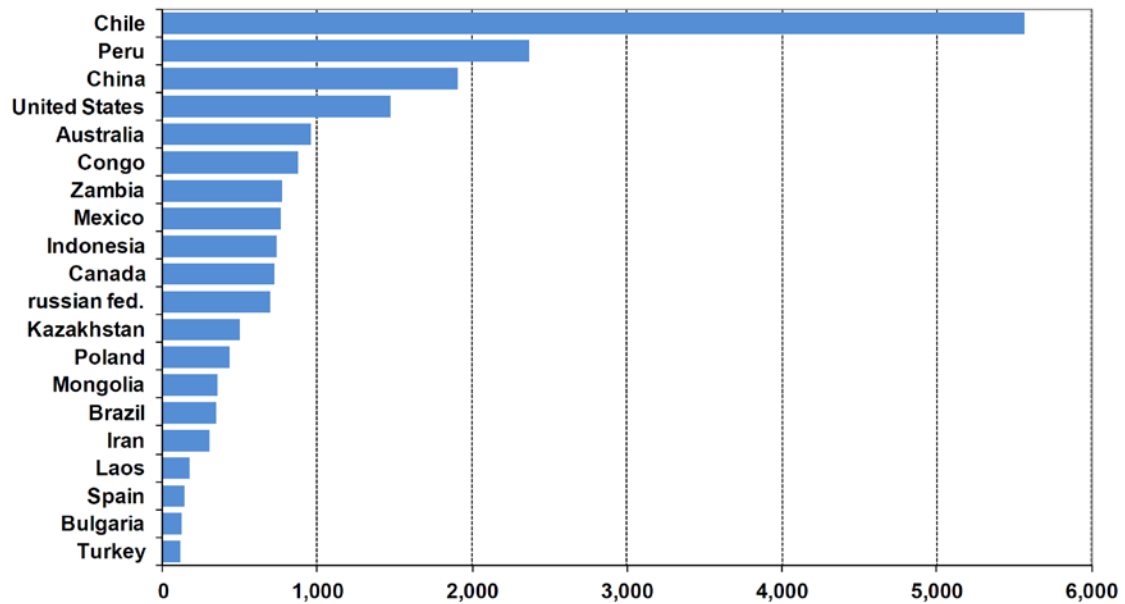
## APPENDIX 7: KGHM Credit Rating History

KGHM Polska Miedz S.A. (Poland)		
Credit rating	Outlook	Date
BBB- ip	Stable	26.03.2018
BBB- ip	Stable	11.12.2017
BBB- ip	Negative	24.11.2016
BBB- ip	Negative	07.12.2015
BBB ip	Stable	17.12.2014
BBB+ ip	Stable	21.06.2013
BBB+ ip	Stable	05.12.2012
A- ip	Stable	29.11.2011
A- ip	Stable	24.11.2010
A- ip	Stable	25.11.2009
A- ip	Stable	05.12.2008
BBB+ ip	Stable	27.11.2007

\* Publication of the rating for KGHM Polska Miedz S.A. was in the period 23.07.2013-13.05.2014 temporarily suspended.

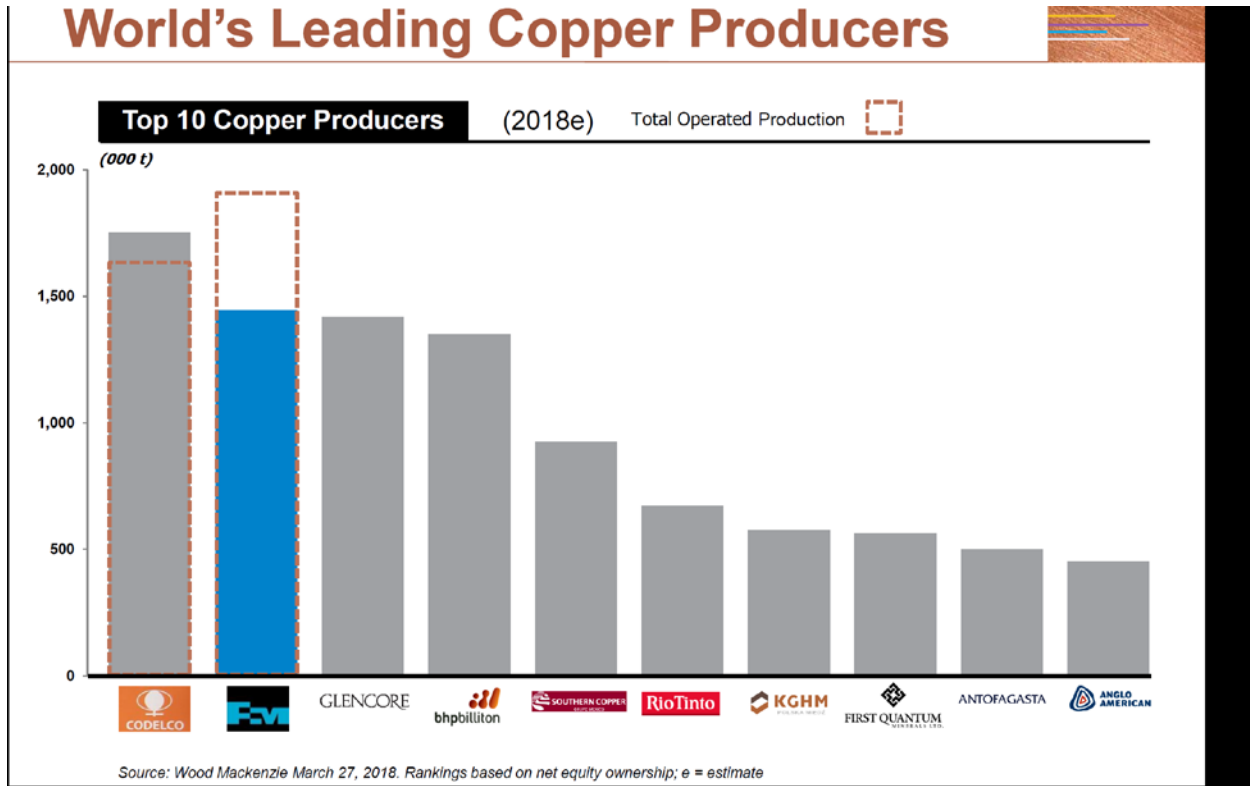
## APPENDIX 8: COPPER MINE PRODUCTION BY COUNTRY, 2016

**Copper Mine Production by Country: Top 20 Countries in 2016**  
(Thousand metric tonnes)  
Source: ICSG



Chile accounted for almost one-third of world copper mine production in 2016 with mine output of 5.55 million tonnes copper.

## APPENDIX 9: WORLD'S LEADING COPPER PRODUCERS, 2018



## APPENDIX 10: TOP 20 COPPER MINES BY CAPACITY, 2017

### Top 20 Copper Mines by Capacity (basis 2017)

Thousand metric tonnes copper

Source: ICSG Directory of Copper Mines and Plants – July 2017

Rank	Mine	Country	Owner(s)	Source	Capacity
1	Escondida	Chile	BHP Billiton (57.5%), Rio Tinto Corp. (30%), Japan Escondida (12.5%)	Concs & SX-EW	1,270
2	Grasberg	Indonesia	P.T. Freeport Indonesia Co. (PT-FI), Rio Tinto	Concentrates	750
3	Morenci	United States	Freeport-McMoRan Inc 72%, 28% affiliates of Sumitomo Corporation	Concs & SX-EW	520
4	Buenavista del Cobre (former Cananea)	Mexico	Grupo Mexico	Concs & SX-EW	510
5	Cerro Verde II (Sulphide)	Peru	Freeport-McMoRan Copper & Gold Inc. 54%, Compañía de Minas Buenaventura 19.58%, Sumitomo 21%	Concentrates	500
6	Collahuasi	Chile	Anglo American (44%), Glencore plc (44%), Mitsui (8.4%), JX Holdings (3.6%)	Concs & SX-EW	454
7	Antamina	Peru	BHP Billiton (33.75%), Teck (22.5%), Glencore plc (33.75%), Mitsubishi Corp. (10%)	Concentrates	450
7	Las Bambas	Peru	MMG (62.5%), Guoxin International Investment Corporation Limited (22.5%), CITIC Metal Co., Ltd. (15%)	Concentrates	450
7	Polar Division (Norilsk/ Talnakh Mills)	Russia	Norilsk Nickel	Concentrates	450
10	El Teniente	Chile	Codelco	Concs & SX-EW	432
11	Los Bronces	Chile	Anglo American 50.1%, Mitsubishi Corp. 20.4%, Codelco 20%, Mitsui 9.5%	Concs & SX-EW	410
12	Los Pelambres	Chile	Antofagasta Plc (60%), Nippon Mining (25%), Mitsubishi Materials (15%)	Concentrates	400
13	Chuquibambilla	Chile	Codelco	Concs & SX-EW	350
14	Radomiro Tomic	Chile	Codelco	Concs & SX-EW	330
15	Sentinel	Zambia	First Quantum Minerals Ltd	Concentrates	300
16	Bingham Canyon	United States	Kennecott	Concentrates	280
17	Kansanshi	Zambia	First Quantum Minerals Ltd (80%), ZCCM (20%)	Concs & SX-EW	270
18	Toromocho	Peru	Chinalco	Concentrates	250
19	Olympic Dam	Australia	BHP Billiton	Concs & SX-EW	225
20	Mutanda	Congo	Glencore Plc	SX-EW	220

**Note:** Capacity data reflects production capabilities not necessarily production forecasts

# WORK-FAMILY CONFLICT AND THE DISRUPTION TO WOMEN'S PROFESSIONAL CAREER DEVELOPMENT

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## ABSTRACT

*This study analyzed the experiences of professional women who interrupted their careers due to the work-family conflict. It's objective was to understand the reasons that led her to interrupt her professional trajectories, as well as to describe her current experiences. To achieve these goals, in-depth interviews were carried out with ten Brazilian professionals from different backgrounds who interrupted their careers. The results suggest that the majority of the interviewees refused to outsource raising the children and that the obligation to perform long working hours was decisive in stop working. The experiences after the interruption of the career reveal feelings of uselessness, low self-esteem and fear of not being able to resume the career.*

**Keywords:** career; women; work-family conflict; career interruption; opt-out.

## INTRODUCTION

The question of interrupted careers is the central theme of the debate over the phenomenon referred to by Belkin (2003) as the 'opt-out revolution'. In an article published in The New York Times Magazine, the author described cases where US professionals, under pressure from the twin demands of both motherhood and the workplace, chose to quit their successful careers. This article inspired a series of studies that attempted to better understand the phenomenon (Maineiro & Sullivan 2005; Warner, 2007; Biese, 2017). These included one by Mainiero and Sullivan (2006), who published a book entitled 'The Opt-Out Revolt'. Although these findings, the issue of the interrupted career resulting from work-life conflict, especially among women, has received little attention within the debate over the implications of such a conflict. One should also stress that the entry of women into the labour market has only intensified the problem of work-family conflict, since this movement has generated pressures not only for them, forcing them to learn to deal with conflicting demands, but also for the men, who have had to learn to dedicate more time to the care of their children and homelife in general (Hall & Gordon, 1973)

The traditional sexual division of labour places a greater burden on the shoulders of women than it does on the shoulders of men, in terms of the effort made to reconcile professional duties with those of the home (Biroli, 2018). This pressure, in most cases, forces many women to interrupt their professional careers in order to dedicate themselves exclusively to taking care of the family and the home. Such interruptions, whilst commonplace, have received only limited attention either from scientific works about work-family conflict or from literature focusing on careers. The Brazilian debate on the challenges facing women in terms of reconciling a career with motherhood has tended to focus on the dilemmas experienced by them, and on possible strategies for dealing with such conflicts, with little attention being paid to cases where such reconciliation is simply not possible (Carvalho Neto, Tanure & Andrade, 2010; Oliveira, Faria, Sarriera, Piccinini & Trentini, 2011; Xavier, Carvalho Neto & Versiani, 2015). International literature, meanwhile, has focused more on understanding the new careers developed by women that were forced to abandon



established professional careers (Mainiero & Sullivan, 2005; 2006; Biese, 2017), than on the dilemmas faced by those who, on seeing their attempts at reconciliation fail, have been forced into choosing to abandon their careers and remain outside the labour market.

The present article has sought to contribute to our understanding of the motives and the experiences of women who, as a result of difficulties in reconciling their professional lives with their home lives, have decided to interrupt their professional careers prematurely. This article has thus sought to: a) understand what has led professionals with successful and well-structured careers to abandon their work in order to dedicate themselves exclusively to motherhood; b) understand the conditions that lead to such decisions being taken; c) understand the different dilemmas that come with such decisions and d) describe these women's present lifestyle away from the workplace environment. This work means to contribute not only to expanding the base of study on the subject of work-family conflict, but also to studies dealing with the professional careers of women. In order to achieve the goals described above, in-depth interviews were carried out with a number of Brazilian professionals from different backgrounds who made the decision to interrupt their careers in order to dedicate themselves to caring for their children. This present article was divided up into five sections, including this introduction. The next section details the theoretical reference framework used and the third section describes the methodology that was chosen. The fourth section presents and discusses the results of the research, and the final section sets out the conclusions reached.

## **WORK-FAMILY CONFLICT, CAREER INTERRUPTION AND THE OPT-OUT PHENOMENON**

In Brazil, up until the 1970s, the participation of women in the labour market was timid at best. Most women had never even considered the possibility of assuming a role that was in any way different to that of the housewife. The dominant family model was based on the traditional concept: it was up to the man, through his work, to obtain the necessary funds to support his family, and it was the woman's job to look after the family, the house and the children: this was the "natural law" that governed families (Arruda, 1996). The growing participation of women in the productive sphere has still not, however been enough to disassociate them from the role of overseeing household chores (Xavier et al., 2015).

Ever since the 1970s, the debate over the concept and the origins of work-family conflict has been assiduous in literature. Nevertheless, the consequences of this conflict have received very little attention (Beauregard & Henry, 2009). The difficulty of reconciling professional activities with those of caring for the family has led many women to interrupt their careers. This interruption can be temporary or definitive, but clearly the longer professionals stay away, the more difficult it is for them to return to the professional environment (Elliot, 2002; Warner, 2013). One should point out that such an interruption or abdication can result in conflict with the partner, a conflict in identity and reduced self-esteem (Spector, 2006). From the 1980s onwards, interest in this subject grew and we saw the emergence of works by the likes of Greenhaus and Beutell (1985). These authors suggested the existence of three primary sources of work-family conflict: (a) time, where different roles compete for people's time; (b) tension, when the pressures imposed by a particular role lead to tiredness or irritability, thereby weakening the performance of the other role; and (c) behaviour, when the conduct of one role is incompatible with the behaviour expected of the other role. These authors developed a model in which they showed the sources of work-family conflict and which suggested that the pressures of the different roles only intensify when the identities of work and the family are increased, and when a negative sentiment exists in relation to the non-fulfillment of functional demands in both spheres.

In Brazil, as a way of reconciling work with family life, many women outsource the work of caring for the home and the children by hiring maids and nannies (Carvalho Neto et al., 2010). Members of the family itself can also offer support to parents in such care giving, and this is a resource that is widely used by couples with twin careers and small children (Dessen & Braz, 2000). Nevertheless, relying on outsourcing to look after the children and the home does not always reduce the work-family conflict faced by professionals that go out to work. This leads many women to abandon their professional lives in order to dedicate themselves solely to motherhood and the home.

Many different interpretations have been put forward to understand the causes that underly the decision-making process that culminates in the interruption of a woman's career, primarily motivated by the difficulty of

reconciling professional work with family life. One should perhaps mention one of these interpretations in particular, described in the article entitled ‘The Opt-Out Revolution’ (Belkin, 2003), where the author considered the fact that successful and qualified professionals were abandoning their careers to dedicate themselves full-time to motherhood to be a veritable “revolution. The author’s argument was based on interviews with eight women, all with degrees from Princeton and all members of the same book club who, in the author’s view represented “a panoramic and instantaneous view of change” (Belkin, 2003, p.4). After this article was published, numerous other articles came out in favour of the theory suggesting that the opt-out phenomenon was the result of the free choice of women to quit the labour market in order to devote themselves to their families.

In the field of career studies, the interruption of a career path as a result of work-family conflict has been discussed, among others, by Mainiero and Sullivan (2005) and Biese (2017), who refer to this phenomenon as ‘opt out’ or ‘opting out’. In ‘The Opt-Out Revolt’, Mainiero and Sullivan (2006) deal with the phenomenon that portrays the option among many professionals to quit their corporate jobs in search of greater personal and professional fulfillment. It is, to a large extent, a movement by women who, because of difficulties in reconciling their family and their professional duties, end up opting to abandon their corporate jobs. The reasons for taking this decision, according to the authors, include an excessive workload, represented by long hours dedicated to work, combined with an accumulation of different domestic chores and child care. The authors stress that the traditional association of such chores with women only increases the pressure on those mothers who go out to work, forcing them to either leave the labour market altogether or to seek shorter working hours. In highlighting the burden of these demands, Mainiero and Sullivan (2006) point to other potential causes behind this exodus of women from the labour market, including frustration with the job itself, health problems, changes in values, lack of encouragement, job cuts in companies, desire to start a business, uncertainty in relation to the career path chosen, as well as discrimination by employers.

Although the debate over the ‘opt-out’ phenomenon began with an acknowledgement of the difficulties faced by women in reconciling their professional lives with their home lives, its subsequent development tended to place more emphasis on the solutions found by these professionals to the dilemmas they faced rather than on the conditions and suffering of those women that had to make the choice to quit the labour market altogether. In this sense, the present study has sought to contribute to the debate on the interruption of women’s careers, looking not only at the reasons that led such professionals to interrupt their professional activities, but also at the conditions that allowed them to make such a decision, their experiences after the interruption and their professional plans vis-a-vis the future.

## METHODS

In order to get a better understanding of the reasons and conditions that lead some women to interrupt their careers because of motherhood a total of ten women were interviewed. All the women interviewed were married, mothers, university educated and some even had post-graduate studies. Table 1 shows the profiles of the interviewees, identified using fictitious names. These women were picked from the authors’ own circle of friends and the so-called “snowball” technique was used. The interviews were based on a script with a list of questions that asked about: 1) the professional career path of the interviewee until the moment it was interrupted; 2) the motives and the conditions that led to this decision; 3) the possible dilemmas encountered as a result of this decision and 4) the current experiences of playing the role of full-time mother.

**Table 1: Profiles of the interviewees.**

Interviewed	Number of children	Age	Age when she interrupted her career	Academic training	Postgraduate
Conceição	2	41	29	Business Administration	x
Aparecida	1	46	36	Business Administration and Pedagogy	x
Fátima	1	36	38	Economics	x
Auxiliadora	1		32	Pedagogy	MBA

Cecília	2	33	28	Law	MBA
Nazaré	1	38	33	Journalism	MBA
Lourdes	2	39	29	Social Communication and Public Relations	MBA
Tereza	2	37	32	Systems Information	x
Rita de Cássia	2	41	33	System Information	x
Ana	2	40	31	Psychology	MBA

Font: authors

All the interviews were recorded and transcribed. The analysis of the manifest and latent content of these transcriptions (Franco, 2008; Boeije, 2010) allowed the authors to identify and discuss the previously highlighted aspects. In order to better organize the discussion of the results, four categories were created to help structure the analysis. Each one of these categories sought to answer the main questions that were the basis of this research study and that formed the framework of the interview script. Because this was essentially a work of content analysis, the researchers sought to identify and group together converging topics in the information provided by the interviewees, thus allowing for answers to be given to the questions that formed the basis of this research study.

## RESULTS AND DISCUSSION

Our analysis of the accounts given by the interviewees was aimed at identifying the main reasons behind their decision to interrupt their professional careers; the dilemmas faced as a result of this decision and current dilemmas. These topics corresponded to the three categories that helped organise the analysis process and that reflected the main findings of our research. The reading of the data, in addition to allowing one to identify these aspects also showed that, despite the fact that they were experiencing basically the same situations: all the interviewees stopped working to dedicate themselves full-time to motherhood; the reasons that led to the decision to stop working and current lifestyle conditions were not always the same, which allowed us to identify three different “profiles” of women. The identification of these three distinct profiles reflects the existence not only of similarities but also of nuances between the narratives of the interviewees.

The first group, representing the majority of the interviewees, was denominated “The Decided”. This was made up of women who apparently nurtured the desire to be full-time mothers and for them, leaving their professional careers was no great sacrifice. Their fictitious names were: Conceição, Auxiliadora, Lourdes, Fátima and Aparecida. The second group was denominated “The Divided” because it included women who reported not only their desire but also their failed attempts to reconcile the two spheres, which resulted in them having to abandon their careers to spend all their time at home. These women included Nazaré, Rita de Cássia and Ana.

The third group, which we decided to call “The Dissatisfied” was made up of two women who claimed to have resisted this interruption to their careers more aggressively, but who were overcome by circumstances and forced to quit their jobs to take care of the children and their home. They demonstrated a good deal of frustration and a strong desire to reverse the situation. The two women in this case were Tereza and Cecília.

### Reasons for Interrupting their Career

The reasons given by all the interviewees behind their decisions to interrupt their careers included the option not to outsource the raising and education of their children, mediated by a careful analysis of the cost-benefit of such a choice; the difficulty of committing to long working hours; and the lack of family support to care for the children. Despite occasional nuances in the way in which “The Decided”, “The Divided” and “The Dissatisfied” approached these factors, they were present in all the interviews.

Nevertheless, some reasons or motives for quitting work did emerge that differed between the groups: the desire to be full-time mothers only appeared in the group of “The Decided”, whilst the complaint that companies did

not give enough support to help reconcile work with motherhood was only mentioned by “The Divided” and “The Dissatisfied”. We now discuss and illustrate these reasons or motives below.

### **Option not to outsource raising and education the children**

Even though the hiring of nannies, maids or creches is a common practice in Brazil, especially among the middle classes (Carvalho Neto, Tanure & Andrade, 2010), “The Decided” were unanimous in stating that they had no interest in these kinds of alternatives: “That really, for me, instead of paying someone, I prefer to look after my own child.” (Aparecida)

Some of these women didn’t even attempt to reconcile the spheres of work and family. They simply quit their professional careers even before attempting any kind of reconciliation and in this sense, they didn’t actually experience work-family conflict (Greenhaus & Beutell, 1985) of any kind. The denomination of “The Decided” mirrors the conviction of these interviewees, in terms of their option to dedicate themselves to motherhood on a full-time basis.

Like “The Decided”, “The Divided” also want to be close to their children. However, there was a degree of ambivalence in this desire, since they also wanted to continue working and made every effort to try to achieve this reconciliation between the two: “I applied for unpaid leave but was denied. I asked for holiday time. I interviewed 25 people to look after my son. I began to realise that it was pointless, I also had difficulty in approving someone to look after my son.” (Ana)

As in the other groups, the option not to outsource child care was also decisive for “The Dissatisfied”. One of the interviewees from this group claimed she “lacked the courage” to go for this option: “...also because I didn’t have the courage to leave my daughter with anybody”. (Tereza)

These accounts reveal that, even though outsourcing child care is a common occurrence, these professionals decided not to go for this option, either because they preferred to participate actively in the day-to-day of their children, typical of “The Decided”, or because they lacked “the courage” to leave their children with others.

### **Obligation to work long hours**

The burden of long hours in the workplace was also a determining factor in the interviewees’ decision to stop working, which adds weight to the argument put forward by Greenhaus and Beutell (1985) that excessive working hours are one of the main factors leading to work-family conflict. In line with the findings of Mainiero and Sullivan (2006), the present research noted that some of the “Decided” claimed that they had worked extremely long hours before becoming mothers. That is why, in foreseeing that time dedicated to work would eventually interfere with time spent with their children, they didn’t even try to reconcile their careers with motherhood: “(...) it just didn’t fit into my head, understand? Leaving him in a nursery all day [...] you don’t just work your own hours, you have evening meetings, once a week we have training.” (Auxiliadora)

In the case of “The Divided” and the “Dissatisfied”, meanwhile, there was some attempt made at reconciliation, but they eventually succumbed to the demands of the workplace:

So, when I worked in the city center, I would leave home at just past five in the morning, because I started work at seven. And when it was five...I would arrive very late and, sometimes, in the financial area you don’t have a fixed time to leave. So, sometimes, I would be arriving at 8 or 9 pm. (Tereza)

In short, for these mothers, a long working day proved to be a huge barrier in their attempt to reconcile their professional careers with home life.

### **Lack of family support for taking care of the children**

The lack of other family members close to the couple able to help out was also a factor weighing on the decision by the members of all three groups to stop working, an aspect dealt by Dessen and Braz (2000) when they talk about the importance of this circle in reconciling home life with work life. Several interviewees referred to this lack of family support: "...and with no family, right? Without even a grandmother, nobody to help. So I decided, no, so I'm really going to quit." (Lourdes)

It's also worth noting that the "Divided" and the "Dissatisfied" also reported that they resented the lack of their partners' help in taking care of the children: "...except that the man, he doesn't assume his household obligations, he doesn't assume them." (Rita de Cássia)

The excessive burden resulting from this lack of support, together with the lack of a family network close by that could help compensate for this imbalance, between them had a major impact on the decision taken by these professionals to interrupt their careers.

### **Desire to dedicate one's time to motherhood fulltime**

As previously mentioned, the decision to be mothers on a full-time basis weighed on the decision by the women in "The Decided" group to quit their jobs. To a large extent, they helped reinforce the traditional model in which the man works to support the family, whilst the woman spends her time on household chores and on taking care of the children, thereby creating the so-called "natural law" of families (Arruda, 1996): "...I had a son, a daughter, and as soon as I became pregnant, I already knew in my head who would bring them up, who would educate them, it would be me...understand?" (Conceição)

The claim that they wanted to dedicate themselves intensely to motherhood helps explain why "The Decided" group admitted to having experienced fewer conflicts when they decided to leave their jobs, and why they said they were more satisfied with their current situations. More identified with the traditional roles of mother and prime career of the home and the children (Xavier et al., 2015), these women, whilst not wholly discarding the possibility of returning to work at some point, chose motherhood as being the most important experience in the current phase of their lives.

## **Dilemmas Faced in Taking the Decision to Interrupt a Career**

The dilemmas faced by "The Decided" in deciding to interrupt their careers were few, given that almost all the women in this group had decided to do it, in favour of motherhood. However, some of them did reveal that they feared they would not be able to get back into the labour market in the future, if they wish to do so: "It's been 12 years without working. Without further studies, doing nothing. How could I get back in, understand? What would the labour market be like? Would they accept me back in?" (Conceição)

This question is highlighted in Elliot (2002) argument that the longer a woman stays out of the labour market, the more difficult it is for her to get back into the professional environment.

The dilemmas faced by "The Dissatisfied" group were even more extreme. These women did not want to interrupt their careers but were forced to do so by circumstances. This led to sentiments of uselessness and loneliness. They also reported being afraid that they would never be able to return to work. One mother in this group stated that, even without her husband's support in domestic chores, she meant to return to work, at whatever cost:

Yes, I have always had to do everything, as I do to this day, except that now....now I have demanded that things change, that I will go out to work even to earn only a thousand reais (three hundred American dollars), but I will go out because at least I will be happy, or I'll get a maid and train to get a better job and study for a civil service entrance exam. (Cecília)

Abandoning their professional lives was not part of their initial plans but because of circumstances, they were forced into it. These women showed low levels of self-esteem and loneliness, felt uncomfortable depending financially on their husbands and feared that they would be unable to return to the labour market in the future.

## Experiences after Interrupting a Career

Even though they stated that they were happy with their role of fulltime mother, some of “The Decided” women let slip that they had low self-esteem issues, as well as a sense of social isolation (Spector, 2006): “...the more I was trying, it was something I had to work hard at to be alright, [...] I wasn’t well, inside, know what I mean?” (Lourdes)

“The Divided” and “The Dissatisfied” groups, meanwhile, stated that from the very moment they began to stay at home, they were constantly thinking of ways in which they could reconcile motherhood with some form of professional work: “But I never stopped. [...] I could never sit still at home, so I sold clothes. [...] And then, when I returned to Rio, I began to do stuff for children’s parties. [...] I had a little blog, did photo editing.” (Ana)

In general, it was noted that “The Decided” group appeared happy in their current fulltime mother roles, even though some of them reported having low levels of self-esteem and feeling lonely. “The Divided” and “The Dissatisfied” groups, meanwhile, saw this situation as merely temporary and had plans to return to formal work. Somewhat uncomfortable with merely playing the role of mothers, these women revealed certain sentiments of embarrassment, isolation, guilt and low self-esteem.

## CONCLUSIONS

The study presented here looked at the question of career interruption as a decision taken by many qualified Brazilian women professionals because of the difficulties they face in attempting to reconcile their professional and their home lives. Among the main conditioning factors behind this decision identified in the study, one should highlight the decision not to outsource childrens’ education; the demands of long hours in the workplace; a desire to be mothers on a fulltime basis; the high costs of hiring childcare services; and the lack of support from the family for such care. These findings help reinforce certain views that have been debated in literature on the subject of womens’ careers, which include: a) the reconciliation between motherhood and a career continues to be a major challenge for professional women (Belkin, 2003; Mainiero & Sullivan, 2005; Carvalho Neto, Tanure & Andrade, 2010; Oliveira et al., 2011; Biese, 2017; Biroli, 2018); b) there has been more continuation than change in terms of gender stereotyping and women continue to be the prime carers responsible for the home and children (Arruda, 1996; Carvalho Neto, Tanure & Andrade, 2010; Xavier, Carvalho Neto & Versiani, 2015); and c) the ever-lengthening working day represents yet another major hurdle to the difficult work-family reconciliation process (Greenhaus & Beutell, 1985; Greenhaus & Powell, 2006).

However, alongside these findings that basically converge with most of the conclusions reached in recent scientific research in this area, this present study also identified an issue that has received limited attention in the same research studies: the different experiences of women who have made the same choices, apparently for the same reasons. Thus, whilst in principle experiencing the same situation – a career interruption and fulltime dedication to motherhood – the interviewees proved to be experiencing this situation in different ways.

“The Decided” group of women chose to interrupt their careers in a relatively conscious way. Long working hours and stressful working conditions in their professional careers had an important influence on this decision. They said that they were happy with their current situation, even though some did not discard the possibility of returning to the labour market. The Divided” group of women experienced a split in their desires between being fulltime mothers and dedicating their time jointly between work and home. Interrupting their careers was neither a desired decision nor a planned one. Their preference was for a job that would allow them to reconcile work with home life. Unhappy, they were looking for ways in which to remain within the labour market. Finally, “The Dissatisfied” group of women included those who did not want to give up their careers but were forced to do so because of circumstances. In being fulltime mothers, they encountered negative sentiments such as low self-esteem, loneliness and depression.

The points raised by this present study suggest that the career interruption phenomenon, in addition to being a very current issue, is also a complex and multifaceted one: although there are points of convergence between the women that take this decision, there are also a number of differences in their experiences that should be incorporated into any debate on the subject. Their importance, both to studies on work-family conflict and to the debate over the careers of women, reveal that much progress still has to be made in relation to the subject and the reconciliation between professional and home life, especially in the case of women of today.

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# TRUMP TRADE POLICIES: FROM NAFTA TO USMCA

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## ABSTRACT

*This presentation considers the changes in United States foreign trade policy wrought by the administration of President Donald J. Trump, particularly as it redefines policies with regard to participation by the United States with regard to trade policies, especially with the other nations of the Americas. There appears to be a significant change in policy, especially with regard to the utilization of multi-lateral treaties. It has been suggested that the Administration appears far more interested in the development of bilateral relationships, but in any case, was intent on removing the nation from the proposed Trans-Pacific Pact [TPP] as well as negotiating new, and presumably more favorable, rules and regulations for the North American Trade Agreement [NAFTA]. This study undertakes an examination of the provisions of the new "NAFTA" style agreement, the United States, Mexico, Canada agreement [USMCA]*

**Keywords:** United States, Canada, Mexico, NAFTA, USMCA, Trade Changes.

## INTRODUCTION

Generally, since the end of World War II, there has been a dramatic change in international trade among the Western powers, from a heavy emphasis on bilateral trade to a significant move to multilateral trade and the creation of formal international organizations of trade. This can easily be seen, for example, by the creation of the General Agreement on Tariffs and Trade [GATT], really the world's first such agreement, which remained in effect from 1948 to 1995. The purpose was to reduce artificial obstacles to trade, such as tariffs, quotas, and other business practices which restricted trade. This, of course, was under the belief that freer and fairer trade would lead to an increase in international trade profits. In addition to the initial agreement, there were a series of subsequent negotiations, called "rounds," which endeavored to improve conditions of trade beyond the initial agreement, such as the "Kennedy Round" which sought to decrease or eliminate "dumping" of products, and more recently, the "Punta del Este Round" which concluded in 1995 with the creation of the much more formalized World Trade Organization [WTO] (Amadeo). The plan seemed to be successful, at least in great part, as, "This boosted world trade by 8 percent during the 1950s and 1960s. That was faster than world economic growth. Trade grew from 332 billion in 1970 to 3.7 trillion by 1993" (Amadeo). There were, of course negatives. These included disruption of some industries, with resulting high unemployment in areas in which these companies no longer were in operation, some industries were assisted by their own national subsidies, which, of course, had the effect of artificially restraining, or at least, redirecting, trade. Textiles were exempted from the GATT regulations, and, there was a massive increase of direct foreign investment (DFI), which has, obviously both the benefit of an increase of funds, but also control by outsiders (Amadeo). Finally, GATT also "lacked a coherent international structure, since the negotiators had expected the agreement to be subsumed under the ITO's umbrella" (From the GATT.....). The latter had been negotiated in 1947, but had never been ratified by the United States, and, therefore, "was stillborn" (From the GATT.....).

It was with this new direction for international economic endeavors in the air that nations strove to create regional organs of economic, and sometimes, political association. In Latin America, for example, these included The Caribbean Community and Common Market [CARICOM] the Central American Common Market, with the Dominican Republic added later [CACOM and CACOM-DR], the Latin American Free Trade Association [LAFTA], the Andean Group, The Market of the South [MERCOSUR] and others, meeting with varying degrees of success.

Some included the United States, such as the Trans-Pacific Pact [which included Latin American countries and beyond], and one discussed in this presentation, the North American Free Trade Association [NAFTA], between Canada, Mexico, and the United States

## **NORTH AMERICAN FREE TRADE AGREEMENT [NAFTA]**

In 2014, I delivered a paper concerning the twenty-years of NAFTA implementation. At that time I cited Bella Balassa's levels of economic integration, noting that NAFTA fell into the first category, "the free trade area, which eliminates tariffs and quotas" (Le Veness, 2014, citing Balassa in Nye, p. 29). Clearly, there had been a mixed reaction to NAFTA.

I concluded the MPSA paper:

.....perhaps the U.S. Chamber of Commerce study said it best by concluding that "it's remarkable that 14 million U.S. jobs depend on trade with Canada and Mexico. That's more than one in 10 U.S. private sector jobs. Behind North America's impressive trade statics numbers lies an integrated web of cross-border supply chains that enhances the competitiveness of all three countries in global markets and gives each country a fundamental stake in the others' success.....NAFTA is more important than ever.....[I] has generated new opportunities for American workers, farmers, consumers and businesses – and for our Canadian and Mexican neighbors: As the United States considers the path forward for our economic partnership with our North American neighbors, NAFTA should continue to play the foundational role it has for the past two decades. (Le Veness, 2014, citing USCC).

Livingston International noted that since the advent of NAFTA

Trade between the three nations has grown exponentially due largely to the establishment of continental supply chains. Each day, the United states[sic.] conducts more than US\$3.6 billion in trade with Canada and Mexico, and since the agreement went into effect, the North American economy has expanded into a combined GDP of more than US\$20 trillion.

NAFTA has allowed North American companies to take advantage of significant cost savings, And initiate productivity-enhancing measures, that have allowed them to become far more competitive. To this end companies have leveraged NAFTA to establish a network of manufacturers, vendors, suppliers and distributors that rely heavily on the free movement of goods across America's borders to maximize the advantages that each market offers (From NAFTA to .Livingston.).

However, not all were in agreement with the positive view of the USCC. There is little doubt but that, after two decades, there were gaps in policy which needed to be plugged, and areas which need change simply because of the passage of time. There is insufficient room here to elucidate all those items, but many will be noted in the portion of the paper related to the transformation of NAFTA into the USMCA.

At the 2018 conference of GBATA in Bangkok, Thailand I delivered a paper covering a broader look at trade policies under the administration of President Donald J. Trump. In that paper, I looked at the policies suggested by Candidate Trump and then later enacted by President Trump. In that presentation, I argued that the administration was moving away from globalized trade and appeared more interested in securing better bilateral trade for the United States, under the slogan "America First." I noted in that paper that the administration had a five element trade policy: "Supporting our National Security, Strengthening the U.S. Economy, Negotiating Better Trade Deals, Aggressive Enforcement of U.S. Trade Laws, Reforming the Multilateral Trading System" (Le Veness, 2018, p. 281, citing Lighthizer, 2).

In that same study I noted that "instead of asserting its sovereign authority to act in response to changing circumstances, the United States continued to passively adhere to outdated and underperforming trade deals and

allowed international bureaucracies to undermine U.S. interests” (Lighthizer, (2018), 1, quoted in Le Veness, 2018, 282). That article continued, “All of which has led to losses, due, for example, to outsourcing and ‘has left U.S. workers and businesses at a disadvantage to global markets, as unfair trading practices flourished in the absence of a strong U.S. response.’ In 2016 the President had made it clear, ‘it is time to declare our economic independence again’” (*Ibid.*). Basically, the United States pulled out of negotiations for the international trade agreement then known as the Trans-Pacific Pact, which, in fact, would have included any number of Pacific Coast Latin American nations, and there was some talk of doing the same with regard to NAFTA. However, rather than eliminate NAFTA the President insisted upon its renegotiation, leading to the creation of the United States, Mexico, Canada Agreement. At the time of the writing of this paper, all three nations had signed the new USMCA, but it was still awaiting, in the United States, Congressional approval.

## UNITED STATES, MEXICO, CANADA AGREEMENT [USMCA]

By the conclusion of last year, all three nations had signed the new USMCA pact. President Trump, claimed that it replaced “the catastrophe known as NAFTA” and would “deliver for American workers like they have not had delivered to for a long time” (Kirby, 2019). The Office of the U.S. Trade Representative summed it up, at least from a U.S. Administration perspective:

:

The United States, Mexico, and Canada have reached an agreement to modernize the 24-year-old NAFTA into a 21<sup>st</sup> century, high-standard agreement. The new United States-Mexico-Canada Agreement (USMCA) will support mutually beneficial trade leading to freer markets, fairer trade, and robust economic growth in North America” (USMCA – Modernizing, 2018).

CoBank noted three improvements over NAFTA, namely:

**A level of certainty.** Free trade on the continent has been instrumental for U.S. agriculture. The Prospect of that changing injected uncertainty about the future competitiveness of the industry, Which the new agreement generally resolves.

**Potential Modest Improvements in market access.** Canada’s agricultural supply management system became a lynchpin in negotiations. The agreement opens the door for modest improvements in market access for U.S. poultry, eggs, dairy and wine.

**Success and Intensified Focus on China.** Reaching a deal is widely seen as a victory for the White House and creates momentum for other ongoing trade negotiations. Administration officials can now also redouble their efforts on China talks (“From NAFTA.....” October 2018).

The Office of the U.S. Trade Representative, summarized the agreement’s “highlights” as follows:

Creating a more level playing field for American workers, including improved rules of origin For automobiles, trucks, other products, and disciplines on currency manipulation.

Benefiting American farmers, ranchers, and agribusinesses by modernizing and strengthening food Agriculture trade in North America.

Supporting a 21<sup>st</sup> Century economy through new protections for U.S. intellectual property, and ensuring opportunities for trade in U.S. services.

New chapters covering Digital Trade, Anticorruption, and Good Regulatory Practices, as well as a chapter devoted to ensuring that Small and Medium Sized Enterprises benefit from the Agreement (US-Mexico-Canada...USTR, 2019).

Obviously, the USMCA means different things to different industries, and indeed, countries. For example, National Public Radio's Scott Horsley claimed "The biggest change this deal makes, really, is to the automotive sector....where it does put higher requirements on North American content and in particular high-wage content, for vehicles to trade duty-free" (Chappell, 2018).. Prime Minister Justin Trudeau of Canada emphasized the establishment of greater surety, noting that it "lifts the risk of serious economic uncertainty that lingers throughout a trade renegotiation process – uncertainty that would have only gotten worse and more damaging if we had not reached a new NAFTA" (*Ibid.*). President Enrique Peña Nieto of Mexico declared that it "is the first trade agreement that incorporates elements that address the social impact of international trade; it enables the participation of more sectors in the economy." National Public Radio's Bill Chappell noted "Among those provisions, he [Peña Nieto] said, are protections for workers' rights and the environment, and elements that seek to extend the benefits of free trade more broadly" (Chappell, 2018). The signing occurred at the G-20 Summit Meeting in Buenos Aires, Argentina, November 30, 2018.

The Office of the U.S. Trade Representative has issued a number of fact sheets on how specific economic sectors of the United States should benefit from the revised agreement now named USMCA. Some illustrations of the major ones follow.

One to be discussed is that of the manufacturing sector. The "Key Achievements" include 1) "Increasing Regional Content Value Rule." The United States automobile industry will receive greater protection with the requirement that seventy-five per cent [75%] of automotive parts must be produced in North America. Of course, this will also assist industries in the other partner countries, Canada and Mexico. 2) "Creating New Labor Content Rule." Factory workers will also be aided in "that 40-45percent of auto content be made by workers earning at least [US] \$16 per hour." This will also require that "a significant portion of vehicle content be made with high-wage labor." Finally, there is an endeavor to have automobile manufacturers in new concepts.. 3) "Stronger Rule of Origin and Enforcement." It is claimed that these new rules and regulations will improve upon and exceed those of both the original NAFTA and the now defunct TPP. They will "address non-tariff barriers related to trade in remanufactured goods, import licensing, and export licensing. With regard to the original NAFTA, the new agreement "will more effectively support trade in manufactured goods between the United States, Mexico, and Canada by removing provisions that are no longer relevant, updating key references, and affirming commitments that have phased in from the original agreement." 4) Strengthening Supply Chains to Provide New Market Opportunities for the Textile and Apparel Sector." This will include a strengthening of the use of USMCA nations' products, and writing a new Chapter for textiles. Also included are rules for individual industries. (Summary of and quotes from "USMCA.....Manufacturing, USTR, 2019).

A second major area of concern for all three nations was in the realm of agriculture, particularly with regard to market and dairy products. The U.S. Department of Commerce did studies state by state on the effect of agricultural exports to Canada and Mexico, and, for example, from my state of New York, the report concluded that in 2017, such sales provided 12,000 positions of employment and were worth US\$1.4 billion to the state's agricultural industry (USDA: New York, 2018).From the U.S. perspective the Trade Representative noted that "this high-standard agreement opens new markets to expand United States food and agricultural exports and support food manufacturing and rural jobs." The USTR noted that in 2017 Canada was first and Mexico third with regard to agricultural exports, "making up 238% of [the] total....which "support more than 325,000 American jobs." (USMCA –Market Access and Dairy....." 2018). "Key Achievements" include enhanced the ability for U.S. farmers to sell milk and dairy goods to Canada, from milk to cheese and a variety of other dairy items. Low priced dairy products of Canadian origin will no longer be able to "undersell" similar U.S. products sold in Canada and elsewhere. All three nation swill exchange information on biotechnology (which the USTR notes, goes well beyond the TPP provisions). They agreed to various other provisions to enhance trade and to eliminate artificial barriers such as "export subsidies or World Trade Organization (WTO) special agricultural safeguards for products exported to each other's market." Another provision all three "have agreed to strengthen disciplines for science-based SPS measures, while ensuring Parties maintain their sovereign right to protect human, animal, and plant life or health." Other measures require each nation to protect "proprietary food formulas," and do not permit artificial "barriers to export of alcoholic beverages," and finally, the Agreement also stresses "important procedural safeguards for recognition of new geographical indications (GIs), including strong standards for protection against issuances of GIs that would prevent United States producers from using common names....." (USMCA.....Strengthening....." USTR, 2018).

Additional urgent areas of agreement concerned rights over intellectual property. Here the USMCA creates an entire chapter dedicated to IP protection for its members. This includes, among the most significant items, ten (10) year patent protection and full copyright protection for seventy (70) years or more depending on circumstances, and strong protection for digital productions. The Agreement has the “Most Comprehensive Enforcement Provisions of Any Trade Agreement,” and the “Strongest Standards of Protection for Trade Secrets of Any Prior FTA” [Free Trade Agreement] (USMCA.....Modernizing, USTR, 2018).

Additionally, the Agreement addresses other economic issues. For example, it raises the *de minimis* levels of the value of shipped goods. The USTR fact sheet noted further that, “Increasing the *de minimis* level with key trading partners like Mexico and Canada is a significant outcome for United States small-and medium-sized enterprises (SMEs). These SMEs often lack resources to pay customs duties and taxes, and bear the increased compliance costs that low, trade-restrictive *de minimis* levels place on lower-value shipments, which SMEs often have due to their smaller trade volumes.” That same report noted that the change in *de minimis* levels will also assist new entrants into this area of manufacture and trade (*Ibid.*).

With regard to Financial Services, there are “updated provisions to allow for the cross-border transfer of data and an updated market access obligation,” and, very interestingly, “the most robust transparency obligations of any U.S. trade agreement, to ensure good regulatory practices in government licensing and other market access authorizations” as well as an “annex on commitments relating to cross-border trade, including application of the national treatment and market access obligation to an expanded list of cross-border services, such as portfolio management, investment advice, and electronic payment services (*Ibid.*).

Concerning currency, the Agreement contains a chapter on “Microeconomic Policies and Exchange Rate Matters,” which through a host of provisions and requirements, will seek to make currency transactions and regulations open to much greater scrutiny,, and “requiring high-standard commitments to refrain from competitive devaluations and targeting exchange rates, while significantly increasing transparency and providing the mechanisms for accountability” (*Ibid.*).

Noting the importance of the issue of worker salaries and benefits to the Trump Administration, the USTR, in addition to the minimum wage issue noted above in this study, supports the right of worker unionization and collective bargaining, and with agreement that .the “labor rights as recognized by the International Labor Organization” will be protected and enforced by law and in actuality. Finally, there are new rules “to prohibit the importation of goods produced by forced labor, to address violence against workers exercising their labor, and to ensure that migrant workers are protected under labor laws.” In short, again, the USTR claims this is the strongest provision in any similar FTA (*Ibid.*).

Finally, there is a new chapter concerning the controversial subject of the environment. Once again, the USTR claims that these nations “have agreed to the most advanced, most comprehensive, highest-standard chapter on the Environment of any trade. Like the Labor chapter, the Environment chapter brings all environmental provisions into the core of the agreement and makes them enforceable.” This new Chapter includes prohibitions against subsidies which are harmful to the fishing environment, new protections for ocean and sea life, better inspection with regard to products which would have an environmental impact, and more (*Ibid.*). That same month, current President of Mexico, Lopez Obrador, successor to President Pena Nieto, expressed confidence that the new agreement would be ratified “(Mexico’s Lopez.....,” 2019).

## USMCA: REACTION AND PASSAGE

As one might well suspect, reaction to the new Agreement was mixed, though it was supported by the leaders of all three nations .Other than that reactions were mixed and it could be suggested that, at least in the United States, they were based in part on economic issues and in part on political considerations. At the writing of this piece, although USMCA was signed by all three leaders, Donald J. Trump, Justin Trudeau, and Enrique Pena Nieto, last November 30, the document still remains in the ratification process, in the United States. Stemming from the Trade Act of 1974 and its successors of 2002 and 2015, trade negotiations can be “fast-tracked” by the U.S. president and then sent to

both Houses of Congress for passage in each. At the present time this poses a problem for President Trump since the Democratic Party controls the House of Representatives, and therefore, must be counted upon if the pact is to become law.

Reporting from Mexico City, Will Grant of the BBC News has noted that Mexico has always been a strong supporter of NAFTA, though I might note this was despite some negative impacts, such as in the production of maize. Grant called NAFTA a “bedrock” for the Mexicans, whom he declared would have likely been willing to accept it as a “bi-lateral” deal if need be. He noted that the Mexicans certainly made concessions to the Americans, as for example, as noted earlier in this paper, they agreed to have a higher percentage of automobiles involved in “cross-border trade” manufactured by much higher paid employees than had previously been the case. However, he concludes “But Mexico’s negotiators found new impetus in the [then] upcoming change in administration. The [then] president-elect in Mexico, Andres Manuel Lopez Obrador, broadly agreed with President Trump that Nafta needed overhauling – albeit for very different reasons than the U.S.” (Grant, 2018). *L & E Global* concludes that since the new USMCA is in the form of a treaty, its provisions must be followed by the Mexican government, and thus a number of required changes either have taken place or were in process when the report was authored (*L & E Global*, 2018). That same report also noted that Mexican labor laws must also follow the tenets of the International Labor Organization’s “Convention 98 on freedom of association and collective bargaining.” Clearly, this would appear to ensure that Mexican workers would receive higher salaries and wages, and will have full rights of labor organization membership and the resulting collective bargaining.. It may also, of course, impact the movement of United States’ manufacturing companies south of the U.S. border. NPR has reported that many manufacturers in Mexico’s automobile industry already conform, and cite Mexican economist Luis de la Calle who suggests that “in the short term, some will just choose to pay the 2.5 percent” penalty for those who do not comply.” Nevertheless, the NPR report further suggests that, “while many economists and analysts are skeptical the new USMC will bring about a wage boom for Mexicans soon, there is hope that other provisions in the agreement can help reform Mexico’s antiquated labor laws and shady union practices” (Kahn, 2018). Then President Enrique Pena Nieto, noted above, praised, in particular, the segments which included “protection for workers’ rights and the environment, and elements that seek to extend the benefits of free trade more broadly” (Chappell, 2018). NPR also reported that President Pena Nieto awarded President Trump’s son-in-law, Jared Corey Kushner, with the Order of the Aztec Eagle (Orden Mexicana del Aguila Azteca), “the highest honor Mexico gives to foreigners.” Carrie Kahn, also of NPR, noted that the award was granted to presidential advisor Kushner for “significant contributions in achieving the renegotiation of the new agreement.....” citing, in turn, the Foreign Affairs Ministry of Mexico. President Pena Nieto termed Mr. Kushner a “‘grand ally of Mexico,’ and an important player in maintaining a good relationship between his country and the Trump administration” (Kahn, 2018). Finally, Craig Kafura, *et al.*, in May, reported the results of a Chicago Council and Global Affairs and Buendia y Laredo, that “80% [of Mexicans] think that the new.....Agreement on trade will be good for their country’s economy,” a figure slightly higher than the highest support they gave to its predecessor, namely, 78%, and “say international trade is good for their nation’s economy, for creating jobs, and for consumers like them.” Some 86% fear a trade war between their nation and the U.S. (Kafura, *et al.*, 2019).

In Canada, it seems that more concerns were raised over the passage of the USMCA. When the Agreement was signed, *The Star* (Toronto) reported that the immediate effect was to end “an acrimonious 13-month negotiation that had hindered the Canadian economy and damaged relations between the two countries.” It noted further that the agreement had “achieved a long-sought goal: convincing U.S. President Donald Trump to preserve a trade accord Trump had repeatedly threatened to terminate.” Prime Minister Trudeau tweeted, “A good day for Canada & our closest trading partners.” Effectively, automobiles were exempted from U.S. tariffs, Chapter 19 of NAFTA involving the “dispute-resolution system or the cultural exemption remain unchanged, though Trudeau “had made his ‘red lines’ in the last weeks of the negotiation.” Trudeau was considered to have made concessions concerning the dairy industry’s trade with the U.S. “TN visas for professional workers” remained the same, though both countries sought changes. Both sides were also in agreement with the phasing out Chapter 11 of NAFTA, which “allows corporations to sue governments.” At any rate, given these and other changes, statements by USTR Robert Lighthizer and the Foreign Affairs Minister of Canada, Chrystia Freeland, noted that USMCA “will result in freer markets, fairer trade and robust economic growth in our region. It will strengthen the middle class, and create good, well-paying jobs and new opportunities for the nearly half billion who call North America Home (Dale and MacCharles, 2018). Of course, there was also opposition. For example, the Canadian Broadcasting Company [CBC] reported that Conservative Leader Andrew Scheer stated, “It’s clear he [Trudeau] capitulated. He signed concession after concession after

concession. The Americans are counting their victories in what they got from Canada and Trudeau is counting his victories in what he didn't have to give away." It also noted that there was serious opposition from the dairy industry of Canada which had urged the Prime Minister not to sign the Agreement due to "fear that the U.S. strong-armed its way to getting more than Canada intended to give up" (McGregor, 2018). Despite all this, it is my belief at the time of this writing, that the Canadian Parliament will pass the Agreement. It might be noted that Mexico has already taken such action.

However, not the same may necessarily be said concerning the U.S. Congress! Many industries clearly support the passage of USMCA. For example, it was noted that "Pass USMCA, a coalition group including Dow Chemicals, the National Association of Manufacturers, and the Pharmaceutical Research and Manufacturers of America, among others sent lawmakers a letter urging its ratification." The letter noted that "Canada and Mexico are America's two largest export markets. More than one-third of America's exports go to these two markets – and trade with these nations supports 12 million U.S. jobs. These figures will grow if USMCA is ratified." (Higgins, 2019). NPR indicated that "the new trade deal.....has been warmly welcomed by farmers, manufacturers and business groups across the country, but not always for the reasons President Trump anticipated." Rather, it may well be because some deal is better than no deal, and there was initial fear that NAFTA might be scuttled and not replaced (Domonoske, 2018). Additional support in agriculture comes from such organizations as "The National Corn Growers Association,, the American Soybean Association, the National Association of Wheat Growers and the National Sorghum Producers" (Sjerven, 2019). The Association of American Railroads called the USMCA "critical" to their industry. They particularly singled out "essential provisions related to e-commerce and digital trade, both of which help drive intermodal rail shipments – one of the most important parts of the rail business" ... They concluded, "It is imperative the Congress ratifies USMCA to allow businesses to plan and grow their operations, hire more workers to handle more activity and move goods between the three nations without burdensome tariffs....." ("Why the.....," 2019)

As indicated, opposition exists from other quarters. For example, AFL-CIO urged Members of Congress not to ratify unless and until Mexico has put into place the enforcement of the guarantees stipulated in the Agreement. They noted the deal lacks tools to assure swift and certain enforcement of labor rules. In fact, it literally allows a party accused of violations to preclude enforcement by an independent dispute settlement panel.. Without enforcement, any new trade rules simply add insult to injury. They provide a veneer of protections for working families and political cover to advance this deal while keeping in place a system of worker oppression as the prevailing North American model" (Letter, 2019) .

A final word about the all-important process of moving the USMCA from a bill to a law! The Agreement has been signed. However, this means and under the fast-track once President Trump sends the Agreement to Congress, which he has not done at the time of this writing,, Congress has up to ninety (90) days to get on board once it receives the Agreement. If not, the bill fails. There is strong opposition from the Democratic Party which controls the majority in the House of Representatives. While there are a number of issues, the main concern appears to be over the question of enforcement of the various provisions, especially labor and the environment. House Speaker Nancy Pelosi said in early May, "unless you have enforcement built in...it is not binding on the other country. We're just talking to ourselves." Sean Higgins added that she noted further, "she wanted to see stronger terms regarding wages in Mexico, environmental protections, and preventing pharmaceutical prices from rising" (Higgins, 2019), House Ways and Means Committee Chair, Representative Richard E. Neal, added, "We have serious concerns about ensuring effective implementation and enforceability of the environmental provisions.....For too long, environmental-related trade enforcement needs have received less attention than other trade barrier cases" (Gillis, 2019). Perhaps one headline sort of says it all, "House Democrats Fixated on Enforcement in New NAFTA; Republicans Don't Seem to Care" (Brinkley, 2019). Clearly, the Trump Administration seeks passage of the USMCA as a replacement for NAFTA, and most Republicans in Congress appear to be on board. In one sense, it is up to the Mexican legislature to ensure there are enforcement provisions which are acceptable to the U.S. At the current moment, the Mexican legislature appears to be moving in that direction, and whether or not their efforts will appease the bill's current opponents remains to be seen.

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# OLFACTORY TRADEMARKS: A POSSIBLE PROTECTION OF SMELL AT WORLD LEVEL?

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## ABSTRACT

*An ancient memory activated by a smell is a reality that everyone has already experienced. This memory can be used commercially and for this reason, companies are very interested in being able to register smells as trademarks. Olfactory trademarks, like other non-traditional trademarks, have been gaining some dimension, but they raise many legal issues, which are being studied in different countries. There are currently countries where it is not possible to register olfactory trademarks, while in others, it is possible to register them, but there is no single procedure to do this register. We will take a critical approach to several existing solutions related to olfactory trademark registration.*

**Keywords:** Olfactory trademark; Non-traditional trademark, USA, European Union, WIPO.

## INTRODUCTION

Within the scope of trademarks, in addition to traditional ones, non-traditional trademarks have been developing and gaining a new dimension. Traditional trademarks express themselves through letters, numbers, words, drawings or symbols, which have in their essence visual aspects. The technological and commercial evolution has led to the emergence of new types of trademarks, non-traditional trademarks, which are based on perception through any of the five senses (vision, but also hearing, smell, taste and touch) and which can be represented by these (Kumar, 2016, p. 129).

In the non-traditional trademarks, sound trademarks are the ones that cause the least problems in their registration, with olfactory, taste and tactile trademarks being the most difficult to register due to the lack of technology that allows the registration and reproduction of these trademarks for the different senses. Companies are currently trying to protect their products with brands that reach all sensory strands, not just traditional brands. In fact, as Lindstrom (2005) points out, “*in order to have a viable future, brands will have to incorporate a brand platform that fully integrates the five senses*”. The possibility of trademarking scents represents a great potential for industry (Karapapa, 2010, p.1336). The aim of producers is to find a legal way of protecting the rights resulting from these non-traditional trademarks.

Smell has a high power to recall memories, which can influence the decision process of acquisition, or not, of a product or service (Barrios Espinosa, 2017, pp. 110-112; Chasser, 2010, p. 54), and it has been shown that humans first distinguish smells and then sounds, textures and colours (Baulieu, 2001), which gives special importance to olfactory trademarks within the group of non-traditional trademarks.

The study of the psychological relationship between odors and a person's behavior has been developing and in the marketing sector is referred to as “sensory marketing”, “polysensorial marketing” or “smellmarketing” (Barbet, 1999, p. 176), which allows the companies to explore the emotional side of the client, based on a smell, which can rekindle memories, interacting unconsciously with the client's memory, leading to unconscious choices and contributing to customer loyalty.

The methodological basis of this study is based on an analysis of the legislation, jurisprudence and doctrine of olfactory trademarks on several countries, representatives of different legal systems, as well as EUIPO, USPTO and WIPO guidelines on this subject.

Graphic representation, distinctive character and non-functionality are the three main exigencies to register an olfactory trademark. In order for a sign to be represented graphically, it must be represented in a form that can be recorded and reproduced, which remains a major difficulty for his registry.

The objective of this work is to analyze several legal systems, especially the EU and USA on olfactory trademarks, study the questions related to graphic representation, the possible solutions for a generalization of its use, in a practical perspective, along with the legal constraints. We will also question which is the most interesting model, the USA or the EU, for the functioning of the olfactory trademark.

## **AN EXAMINATION OF VARIOUS LEGAL SYSTEMS REGULATING THE OLFATORY TRADEMARKS**

Trademarks, like others intellectual property rights, are based on the principle of territoriality. The legal rules applicable to trademarks are national based, and the effects of the trademarks are produced within the territory of the country.

We will analyze several legal systems, especially the EU and USA, with a brief reference to Australia, China, Colombia, India, Malaysia, Mexico, South Africa, United Kingdom, and finally the position of WIPO, trying to present several solutions for the possibility of registration of olfactory trademarks.

### **European Union**

It was with Regulation (EC) No 40/94<sup>1</sup> that the Community Trademark (CTM) was created and at the same time the Office for Harmonization in the Internal Market (OHIM, later European Union Intellectual Property Institute (EUIPO)). The concept of trademark was defined in article n° 4 as: *“A Community trade mark may consist of any signs capable of being represented graphically, particularly words, including personal names, designs, letters, numerals, the shape of goods or of their packaging, provided that such signs are capable of distinguishing the goods or services of one undertaking from those of other undertakings”* and demanded that the trademark had to be represented graphically in order to be granted.

The requirement of graphical representation of the olfactory trademark made the registration of these trademarks very difficult in the EU. The requirement of graphic representation is that it be clear, precise and intelligible for all those who wish to consult this register, whether it is a competitor, a consumer or the general public. In that regard the OHIM Third Board of Appeal held in Orange: *“an imperative necessity for conducting the examination and registration procedure, including the search, and is governed by the interests of the public and all owners of registered rights such as, for example, the owners of earlier trade mark rights who wish to determine the scope of protection of the application, and finally with regard to possible opposition proceedings”*<sup>2</sup>.

At EU level only the Dutch company Vennootschap Onder was able to approve an application, filed in 1996, for the olfactory trademark registration of a *“freshly cut grass odor applied to tennis balls”* (class 28 in the Nice classification). This registration was granted on 11 October 2000 (not renewed and expired on 11 December 2006), referring the OHIM: *“The smell of freshly-cut grass is a distinct smell which everyone immediately recognizes from experience. For many, the scent of fragrance of freshly cut grass reminds them of spring, or summer, manicured lawns or playing fields, or other such pleasant experiences. The Board is satisfied that the description provided for the olfactory mark sought to be registered for tennis balls is appropriate and complies with the graphical representation requirement of Article 4 CTMR”*<sup>3</sup>.

In 2002, the Sieckmann case-law<sup>4</sup> on the intention to register a scent in Germany described as “*balsamically fruity with a slight hint of cinnamon*” for services in classes 35, 41 and 4212, was a reference in this regard, by accepting that the trademarks may be non-visible signs such as smells or sounds, but rejected the application for registration of an olfactory trademark on the grounds of the difficulty of graphic representation, as required by the CTM Regulation.

The Court of Justice of the European Union and EUIPO have always had a rather restrictive interpretation of the possibility of granting a trademark without corresponding graphic representation.

The Sieckmann seven criteria state that a sign must be clear (not ambiguous), precise (e.g. a colour cannot merely be described as ‘purple’), self-contained (e.g. music notes), easily accessible (e.g. the Pantone international database), intelligible, durable (the graphical representation must remain consistent), and objective. This jurisprudence allows to register an olfactory trademarks if the seven criteria are verified, if not that precludes the possibility to register an olfactory trademark.

The Advocate General Ruiz-Jarabo Colomer, in this case, has said that the various scientific systems to record smells, lacked “*the clarity and precision necessary for the visual representation of a distinctive mark*”<sup>5</sup>, and confirms that without graphical representation of the trademark there is no olfactory trademark.

The recent legislative developments concerning the EU Trademark (EUTM), with the adoption of Regulation (EU) 2015/2424 and Directive 2015/2436, has brought new features such as the fact that the EU trademark no longer needs graphic representation, and it became possible to register an olfactory trademark as an EU trademark, as stated in article 4<sup>o</sup>: “*An EU trade mark may consist of any signs, in particular words, including personal names, or designs, letters, numerals, colours, the shape of goods or of the packaging of goods, or sounds, provided that such signs are capable of: (a) distinguishing the goods or services of one undertaking from those of other undertakings;...*”

Since the Regulation (EU) 2015/2424 the EU trademark doesn’t need graphic representability, and it’s possible to represent a signal in any suitable form using a technology which is generally available and therefore not necessarily through graphic means, provided that the representation is clear, precise, autonomous, easily accessible, intelligible, durable and objective (which are the requirements of the Sieckmann jurisprudence).

According to the recent EUIPO Guidelines, olfactory trademarks are not currently accepted for registration, although in theory they are considered eligible for registration under Regulation (EU) 2015/2424 (EUIPO Guidelines, 2017, Part B, Examination, 33), but, with the current insufficient state of technology related do registration of smells, they do not meet the Sieckmann criteria.

In the EU, the EUIPO Guidelines are not binding on the courts and new applications for olfactory trademarks are awaited in EUIPO, with a new substantiation, namely of a technological nature that will allow the production of new jurisprudence in this matter.

## USA

In the USA, since 1946 with the Lanham Act it is described the variety of items that can be considered as trademarks, not expressly referring to olfactory trademarks, but recognizing that an odor can function as an origin identifier where it has no utilitarian function, as long as it is able to demonstrate the exclusive and uninterrupted use of a particular signal during a specific period (secondary meaning).

In this country for the registration of non-visual trademarks, such as olfactory, graphic representation is not required, but simply a writing with a clear and detailed description of the sign. Whoever wants the registration, just have to prove the non-functionality and the distinctiveness.

Section 2 (f) of the Lanham Act provides that “*nothing shall prevent the registration of a mark used by the applicant which has become distinctive of the applicant's goods in commerce.*”

With the Qualitex jurisprudence<sup>6</sup> in 1995, although not about olfactory trademarks, but on colour trademarks, it began to be possible the registration of non-traditional trademarks in the USA. The Supreme Court held that the use

of colour by Qualitex did not violate the doctrine of functionality, considering that colour had no function in the product or operation of the product, other than identifying the product, which is the purpose of the trademark. The USPTO Trademark Manual of Examining Procedure (TMEP) provides that olfactory trademarks may be registered, but the amount of documentation necessary to establish that an odor functions as an olfactory trademark is substantial (TMEP § 1202.13 (2018)). In order to register an olfactory trademark, or a non-traditional trademarks in general, a graphic representation is not required, but a clear and detailed description of the odor intended to register is needed as well as a proof of non-functionality and its distinctive character (USPTO - 37 CFR § 2.52 (e)).

TMEP (2018), n° 807.09 "Drawing of Sound, Scent, or Non-Visual Mark", expressly states that olfactory trademark registration does not need to be graphically represented: *"The applicant is not required to submit a drawing if the mark consists solely of a sound (e.g., music or words and music), a scent, or other completely non-visual matter. In a paper application, the applicant should clearly indicate in the application that the mark is a "NON-VISUAL MARK." (.....) If the applicant is submitting a TEAS application for a scent mark, the applicant should indicate that the mark type is "Standard Character" and should type "Scent Mark" in the "Standard Character" field. The USPTO will enter the proper mark drawing code when the application is processed. Non-visual marks are coded under mark drawing code 6 in the automated search system"*.

The distinctive character is fundamental to the granting of an olfactory trademark and the USPTO uses two tests to determine the existence of this characteristic of the trademark. The "Abercrombie test" used essentially in word trademarks and the "Seabrook test" applicable to olfactory trademarks and non-traditional trademarks, which requires the verification of four factors: *"(1) a "common" a basic shape or design; (2) unique or unusual in a particular field; (3) a mere refinement of a commonly adopted form of ornamentation for a particular class of goods which consumers view as mere ornamentation; and (4) capable of creating a distinct commercial impression from the accompanying words"*<sup>7</sup>.

For the concession of the olfactory trademark, besides the distinctive character, it has to prove its non-functionality through four factors: *"(1) the existence of a utility patent which discloses the utilitarian advantages of the design is evidence of functionality; (2) the existence of any advertising or promotion of the proponent of trademark rights which has the functional and utilitarian advantages of the very design aspect it now seeks to protect; (3) the existence of other alternative designs which perform the utility function equally well; and (4) whether or not the design results from a comparatively simple, cheap or superior method of manufacturing the article"*<sup>8</sup>.

In this framework, the legal system of USA allows the existence of olfactory trademarks. The first olfactory trademark was a plumeria blossom-scented embroidery thread, and it was issued in 1990, required by the California company OSEWEZ, which was canceled in 1997 for lack of use<sup>9</sup>.

There are others registered olfactory trademarks in the USA, for example: "Flowery musk scent" in Verizon stores (Reg. 4618936); "Bubble gum scent" for sandals (Reg. 4754435); "Piña colada scent" to coat ukuleles (Reg. 4144511); "The coconut smell" that fills flip flop stores (Reg. 4113191); "Strawberry, cherry, and grape" lubricants for combustion engines (Reg. 2568512, 2596156, 2463044).

Recently, in March 2017, Hasbro, Inc. filed an application to register the distinctive aroma of Play-Doh, a modeling clay from Hasbro. Hasbro describes the Play-Doh scent *"as a unique scent formed through the combination of a sweet, slightly musky, vanilla-like fragrance, with slight overtones of cherry, and the natural smell of a salted, wheat-based dough"*<sup>10</sup>.

On May 15, 2018 the USPTO, having proven non-functionality of the odor and its distinctive character, granted Hasbro, Inc. the olfactory trademark requested for Play-Doh<sup>11</sup>.

The "Play-Doh" odor is currently one of the 13 olfactory trademarks active in the USA, which confirms that despite the legal possibility of registering these types of trademarks, is still difficult to obtain an olfactory trademark.

## Australia

The Trade Marks Act 1995 changed the definition of trademark, ratified the provisions of the TRIPS Agreement and took into account the legally binding EU provisions on trademarks.

Since 1995 in Australia is possible to register olfactory trademarks under Section 17 of the Trade Marks Act 1995, which states that a trademark is “*a sign used, or intended to be used, to distinguish goods or services dealt with or provided in the course of trade by a person from goods or services so dealt with or provided by any other person*”. Section 6 expressly states that scents may be registrable as a sign, and Section 40 stipulates that a trademark must be graphically represented to be registrable.

A representation of the trademark must be included in the application (Section 27(3)(a)) “*by way of a concise, written description of the scent and how it will be applied*”. Australia requires a graphical representation of the olfactory trademark and, like EU, follows the Sieckmann criteria (Kumar, 2016, 135).

As it happens in countries where it is possible to register olfactory trademarks, the number of register olfactory trademarks is also very small in Australia. To date Australia has granted only one olfactory trademark, “eucalyptus scent” for golf tees in Class 28<sup>12</sup>.

## China

Like in many other countries China is making amendments to the Intellectual Property Law that provides for the registration of non-traditional trademarks, such as olfactory trademarks. This amendments states that the Trademark Office “will choose the appropriate time” to accept such trademarks as capable of being registered (Ollier, 2010), which implies that China is studying this issue.

On October 31, 2012, (effective as of May 1, 2014) the third revised draft of the Trademark Law passed in the State Council, and removed the requirement for trademark visibility, expanded the scope of the object of trademark registration, and the sound trademark was added for the first time. In February, 2016, about two years after trademark office started to accept applications of sound trademark, China Trademark Office approved the first sound trademark, which was required by China Radio International.

However, smells are still not allowed to be registered as olfactory trademarks.

## Colombia

The Colombian trademark law requires graphical representation of all trademarks, and for the olfactory trademarks the EU Sieckmann criteria are also followed by the courts and the doctrine in this country (Barrios Espinosa, 2017, p. 115).

The Decision 486 of 2000 (*Acuerdo de Cartagena*), establishes that smells can be signs that can be protected as a trademark. For a smell to be registered as a trademark the same requirements that are required for the registration of any other sign must be met, that is, the odor must be distinctive, non-functional and capable of being represented graphically.

There are still no olfactory trademarks registered in Colombia. The “Superintendencia de Industria y Comercio” argues that the Sieckmann criteria are not fulfilled, that the applications submitted are not clear, precise, self-contained, easily accessible, intelligible, durable, and objective.

## India

The India trademark law, like many other countries, follows the statues of international treaties on Intellectual Property, and so neither including or excluding the scope of non-traditional trademarks.

Trademark is defined as a mark capable of being represented graphically<sup>13</sup> and Rule 2(1) (k) clarifies that “*graphical representation means the representation of a trade mark for goods or services in paper form*”, and this exigence confirm that olfactory trademarks do not meet the necessary requirements, under the Indian trademark system to be registered.

But since the existence of non-traditional trademarks it’s possible, the Office of Controller General Patents, Designs & Trade Marks has produced a Draft Manual for Trademark Practice and Procedure<sup>14</sup>, where it clarifies the question of graphical representation.

The courts have already granted registration of colour and shape trademarks, and if the provisions of the Draft Manual would be included in the next revision of the trademark law the register of olfactory trademarks would be possible (Kumar, 2016, p. 136).

## Malaysia

Under the current trademark law in Malaysia, it is not possible to register an olfactory trademark, as they have to be graphically represented. Section 40 of the Trademarks Act specifies that “*an application for the registration of a trademark must be rejected if the trademark cannot be represented graphically*”. If the description or representation of the trademark is not satisfactory, if it does not demonstrate the nature of the trademark sufficiently or show each feature of the trademark sufficiently, the application will be refuse (Sidhu, 2011, p. 89).

The imminent accession of Malaysia to the Protocol of Madrid (part of Malaysia’s obligation under the ASEAN Economic Community and commitment to the ASEAN Blueprint 2025), and the position of the Intellectual Property Corporation of Malaysia (that has decided to follow other jurisdictions in expanding the scope of protection to non-traditional trademarks), contributed to the proposed change of Trade Marks Act 1976 and would enable the registration of “sound, smell and colours”.

The proposed amendment was presented at Parliament on 9 April 2019 and should be presented at the next parliamentary session in July, for a second reading.

## Mexico

On 18 May 2018, the Mexican Congress approved the Amendments and Additions to the Industrial Property Regime in Trademarks, introducing important modifications concerning the possibility of registration of non-traditional trademarks, such as sound and olfactory trademarks, and also the protection of holograms. This is the biggest change to the Mexican Trademark Law after the 1994 reform produced as a consequence of the entry into force of the North American Free Trade Agreement.

In 1994 the text of article 88° limited the registrations to any visible sign. After 2018 a new definition establishes that a trademark is “*any sign perceptible by the senses and susceptible of being represented in a way that allows determining the clear and precise object of protection, which distinguishes products or services from others of the same type or category on the market*”, which enables to register non-traditional trademarks. The graphical representation is not a requirement in this law.

In 2018, after successfully registering the olfactory trademark of Play-Doh in the USA, Hasbro filed an olfactory trademark application for Play-Doh in Mexico, which was granted in February 2019, together with other non-traditional trademarks. The registration certificates says: Hasbro, Inc. for “*a distinctive scent formed by a sweet, somewhat mossy combination of a fragrance with vanilla tones, with small cherry accents and the natural smell of a salty wheat-based dough [Play-Doh]*”<sup>15</sup>.

## South Africa

A trademark is defined as “any sign capable of being represented graphically, including a device, name, signature, word, letter, numeral, shape, configuration, pattern, ornamentation, colour or container for goods, or any combination thereof”<sup>16</sup>. Once again, graphic representation is a condition for an olfactory trademark register.

The EU Sieckmann criteria are also applied in this country. They are actually discussing if they should keep the Sieckmann criteria, and have a difficult system to register this kind of trademarks, or, choose to drop the Sieckmann criteria and have a more liberal system, with a written descriptions request, like in the USA (Kallis, 2018, pp. 46, 47). Until now there are no olfactory trademarks registered in South Africa.

## United Kingdom

In some European countries, some national olfactory trademarks have already been granted. In the United Kingdom Goodyear Dunlop was able to register a “floral fragrance reminiscent of roses” applied to tires (Class 12 of the Nice classification)<sup>17</sup> and Unicorn Products was able to register an olfactory trademark of darts with an odor acre “Bitter Beer”<sup>18</sup>.

In the same day, Chanel try to register “Chanel n° 5”<sup>19</sup> by describing its product as: “*The scent of aldehydic-floral fragrance product, with an aldehydic top note from aldehydes, bergamot, lemon and neroli; an elegant floral middle note, from jasmine, rose, lily of the valley, orris and ylang-ylang; and a sensual feminine note from sandal, cedar, vanilla, amber, civet and musk*”. The scent also being known by the written name of Chanel n° 5. Failed to do so on the count that the scent of the perfume being the very essence of the product. In reality, the perfume constitutes the product itself as opposed to an indication of its origin.

The exigence of graphical representation, and the difficulty to store and reproduce the smell graphically, makes it very difficult to register an olfactory trademark.

## WIPO

At an international level the registration of scents as trademarks is not *ab initio* excluded. The Paris Convention (Art. 6(1) says: “*The conditions for the filing and registration of trademarks shall be determined in each country of the Union by its domestic legislation*”. This convention leaves to the contracting parties the possibility to incorporate relevant specifications in their domestic laws.

The Madrid Agreement and the Madrid Protocol does not refer to olfactory trademarks. The TRIPS Agreement remains neutral on this subject by stating that the contracting parties may provide that only visually perceptible signs are eligible for protection.

The Singapore Treaty on the Law of Trade Marks, 2006, is the first trademark law International Treaty to explicitly recognize non-traditional trademarks, visible, such as “*holograms, three-dimensional marks, colour, position and movement marks*”, and trademarks which are not visible such as “*sound, olfactory or taste and feel marks*”, but the required form of representation for olfactory trademarks is left to the rules and legislation of each country.

At WIPO level the importance of olfactory trademarks is also confirmed by the fact that it is already possible to register olfactory trademarks (odor, scent or smell) in many countries. A survey conducted by WIPO revealed that of the 72 Industrial Property Institutes that responded, 22 accepted the registration of olfactory trademarks (WIPO, 2006, p. 9).

Despite the efforts made by WIPO, it was not possible to identify an area of convergence with respect to the representation of olfactory trademarks. Some jurisdictions have accepted that such trademarks may be represented by



a description, whereas for other jurisdictions a description may not adequately represent the character of such trademarks (WIPO, 2009, p. 4).

It is verified that national laws may differ greatly on the means considered acceptable for the graphic representation of olfactory trademarks. Most systems require some form of graphic representation of smell signals. However, it has proved difficult to determine whether a word description would satisfy this requirement. The discussion on olfactory trademarks remains current and WIPO has recently expressed its views on this matter by proposing, by suggestion of EUIPO, the revision of WIPO Standard ST.60 to include non-traditional trademarks, in particular olfactory trademarks (WIPO, 2018, p. 3).

## FINAL CONSIDERATIONS

Non-traditional trademarks are starting to gain dimension in many countries, with commercial, marketing and law protection. As said by Vaver (2005, p. 16): *“Unconventional marks are today’s more outré elements: smell, sound, colour, shape, even taste and gesture. Until recently, such things were thought to be unregistrable and largely unprotected at common law. This position is changing internationally. Smell, sound, colour and even shape marks now appear on many trademarks registries and in trademark legislation and treaties”*.

To register an olfactory trademark there are three main exigencies: (1) distinctive character and (2) non-functionality, which are requirements demanded by the generality of legal systems, and (3) graphic representation which is required for most legal systems (vg. Colombia, Malaysia, South Africa). But there are some countries where the representation made by a writing with a clear and detailed description of the sign would satisfy this requirement (v.g. USA), and others where the description can be made by any appropriate form using generally available technology (v.g. EU).

Related to graphic representation the fact that there is no generally accepted international classification of smells, as with international colour codes or musical notation, to identify an olfactory sign objectively and precisely through the attribution of a name or a precise code specific to each smell<sup>20</sup> is one of the main problems to make a graphic representation and register an olfactory trademark. In many countries the olfactory trademark rely heavily on the ability to supply a precise graphical representation for a smell.

A smell may be graphically represented through gas chromatography or liquid chromatography. However, the WIPO understands that this technique *“is not exact, and it is subject to so much uncertainty that it does not fulfil the demand for unambiguous graphical representation”* (WIPO, n.d., p. 9). There is no unification of criteria on what is the appropriate way to represent it graphically, or to do an accurate description, which has made that only a few people have managed to register an olfactory trademark in the world.

Olfactory trademark is yet premature due to weak distinctive character of the smell itself in the scientific and technological perspective. But we are currently witnessing a technological and digital evolution (electronic nose device and digital aromatic sample) that improves a faithful representation of the most difficult signs to translate visually, such as olfactory.

In the EU the importance of technological evolution is confirmed by EUTM Implementing Regulation, which provides that the *“trade mark shall be represented in any appropriate form using generally available technology”* (art 3(1)).

Thus the demand for graphic representation, or the requirement for a clear, precise, autonomous, easily accessible, intelligible, lasting and objective representation (EUIPO), will be fulfilled with these new technological and digital forms of representation of the olfactory trademark (Karapapa, 2010, pp. 1355-1357).

Also analytical chemistry research is advancing significantly, and also with artificial intelligence (particularly neural networks), scents can be identified with a high accuracy *“close to 100%, without any false positives or false*

*negatives*” (Ugena, 2016, p. 7), and in a near future gas chromatography can be successfully used to represent olfactory marks.

Another way to register a smell is the smelling screen, which allows an olfactory trademark to be sampled and later to be reproduced, ensuring with this technology the “*principle of easy accessibility will be accomplished*” (Hernandez-Marti-Perez, 2014, p. 668).

The easy way to register an olfactory trademark in the future is related to technological advances that allows having a durable and stable sample that could be easily and objectively perceived by the public through the consultation of a public database. Today, even in countries where the graphic representation is not required, the requirements concerning the description of the trademark can only be fully verified with the evolution of technological equipment.

Trademarks, especially in a globalized economy, are increasingly important in distinguishing the products and services of a company from another. With the advancement of technology, other realities such as smells have begun to be recognized as trademarks. However, registration of olfactory trademarks is still not easy and accessible. In order to more easily meet the legal requirements for its registration, some technological advancements will be needed, as:

- adoption of an international classification (with well-defined categories) of odors with durable and stable samples that can be easily accessed;
- electronic nose, colorimetric electronic nose, digital aromatic sample, E-sensing, and its respective smell database with samples that can be submitted with the application, stored and available for future public research;
- high-performance liquid chromatography that provide good qualitative and quantitative information about complex mixtures;
- mass spectrometry that provide structural information about the components;
- scent-dome that will allow PC-users direct smell-simulations.

The European trademark system is in a state of ambivalence. The EUTM Regulation allows the register of this type of trademarks, but the EUIPO Guidelines, influenced by the Sieckmann criteria, state that olfactory trademarks are currently not acceptable for registration.

But the EUIPO Guidelines are not binding on the courts. New applications for olfactory trademarks are awaited in the EUIPO, with new substantiation, namely of a technological nature that will allow the production of new jurisprudence in this matter.

Also in the USA, where is already possible to the register an olfactory trademark, the technological evolution will facilitate the requirement of the description of the smell.

In EU, that actually doesn't requires graphical representation, and in several others countries, they are guided by the Sieckmann jurisprudence. In the USA they are guided by the Qualitex jurisprudence. Replacing the graphic representation requirement, which EU as already done, is fundamental for the evolution of non-traditional trademarks. This requirement is no longer consistent with technological development, and should be replaced by a different type of representation, with technological nature.

The importance of olfactory trademark is confirmed by the fact that we are nowadays seeing several countries who are changing their legislation, with the purpose to allow the registration of olfactory trademarks.

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## ENDNOTES

<sup>1</sup> Council Regulation (EC) No 40/94 of 20 December 1993.

<sup>2</sup> Case R 7/97-3 Orange Personal Communications Service Ltd. [1998] E.T.M.R., 337, para. 10.

<sup>3</sup> Case R 156/1998-2, Vennootschap onder Firma Senta Aromatic Marketing Application, OHIM's Second Board of Appeal, February 11 1999. (para 14-15.)

<sup>4</sup> Ralf Sieckmann v Deutsches Patent und Markenamt ("Sieckmann") (Case C-273/00).

<sup>5</sup> Ralf Sieckmann v Deutsches Patent und Markenamt ("Sieckmann") (Case C-273/00).

<sup>6</sup> Qualitex Co. v. Jacobson Products Co., 514 U.S. 159, 1995.

<sup>7</sup> Seabrook Foods, Inc. v. Bar-Well Foods, Ltd., 568 F.2d 1342 (C.C.P.A. 1977).

<sup>8</sup> Morton-Norwich Products, Inc., 671 F.2d 1332 (Fed. Cir. 1982).

<sup>9</sup> Clarke, 17 U.S.P.Q. 2d (BNA) 1238 (T.T.A.B. 1990).

<sup>10</sup> Hasbro, Inc. Non visual Play-doh scent mark. Reg. No. 5,467,089.

<sup>11</sup> Hasbro, Inc. Non visual Play-doh scent mark. Reg. No. 5,467,089.

<sup>12</sup> E - Concierge Australia Pty Ltd, Reg. No. 1241420, filed 2008.

<sup>13</sup> Section 2(1) of Trade Marks Act 1999, India.

<sup>14</sup> A Draft Manual for Trademark Practice and Procedure, 2015.

[http://www.ipindia.nic.in/writereaddata/Portal/IPOGuidelinesManuals/1\\_32\\_1\\_tmr-draft-manual.pdf](http://www.ipindia.nic.in/writereaddata/Portal/IPOGuidelinesManuals/1_32_1_tmr-draft-manual.pdf)

<sup>15</sup> Trademark application number 2088148, filed on 10 August 2018 in class 28.

<sup>16</sup> Section 2 of the Trade Marks Act 1993.

<sup>17</sup> Sumitomo Rubber Co's Application No. 2001416, 31.11.1994

<sup>18</sup> Unicorn Products' Application No. 2000234, 31.11.1994.

<sup>19</sup> Chanel's Application, 31.11.1994.

<sup>20</sup> Eden SARL v OHIM, Case T-305/04, October 27, 2005 concerning the "smell of ripe strawberries" for a wide variety of household goods, leather goods and paper goods.

# ENTREPRENEURIAL TENDENCIES OF GRADE 12 LEARNERS IN A RURAL AREA IN LIMPOPO PROVINCE, SOUTH AFRICA

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## ABSTRACT

*In a country like South Africa, where unemployment levels are high, over 27%, promotion of entrepreneurship becomes crucial. Unemployment levels are especially high in youth where more than 50% of youth are unemployed. The rural youth are worse off than urban youth. Entrepreneurship and small business initiatives are seen as some of the major economic development strategies for many countries the world over. This paper is based on a study that was conducted on grade 12 pupils from a rural area within Limpopo Province in South Africa. The purpose of the study was to assess the entrepreneurial interest amongst grade 12 learners, investigate if these learners are aware of the small, medium, micro enterprise support programmes that are available in the country for especially youth entrepreneurs, as well as to find out if they intend starting their own businesses. The study used the theory of planned behaviour to assess what the learners in the study intended doing after completing their studies. Data were collected using questionnaires from a total number of 170 participants. The participants were learners who were registered for business studies. Descriptive analysis was used to analyse data. The research findings showed that most learners had no entrepreneurial intentions or interest. However, most learners were not aware of the South African support programmes that are available for entrepreneurs, especially youth entrepreneurs. The study recommends that the education system, especially business studies, as well as parents and the overall community should provide guidelines to encourage the youth to become more interested and engaged in entrepreneurial matters. Therefore, one of the important considerations is to complement the business study teachings in high school to include pertinent information that will encourage entrepreneurship. The study hopes that making people aware of entrepreneurial opportunities from a young age is one of the approaches that will plant the seed and thoughts of self-employment early.*

**Keywords:** youth unemployment; entrepreneurship; learners; entrepreneurial intention; rural economic development; SMMEs.

## INTRODUCTION

The urgent need for South Africa to prioritise economic growth and creation of employment for its unemployed cannot be emphasised enough. The country, South Africa, has high unemployment levels at 27.6% as recorded in the first quarter of 2019 (Statistics South Africa [StatsSA], 2019). The unemployment of youth, ages 15 – 35 years, is even higher than the national average at 55.2% for the same period. Women are also more jobless (at 29.3%) compared to men at 26.1% unemployment rate. Although the Limpopo Province, reports a low unemployment level of 16.5% compared to the national average, the expanded unemployment rate surges to 38.8%, showing that the province has one of the highest numbers of discouraged job seekers (van Zyl, 2019). Entrepreneurship and small, medium and micro enterprises (SMMEs) can help in improving employment levels as well as the overall economic growth of any area. Research has shown that SMMEs have contributed significantly to economic growth in most countries (Rungani & Potgieter, 2018). Therefore, promotion and support of entrepreneurship and SMMEs should be encouraged especially for areas with high unemployment levels. Working with youth is even more crucial as they are affected more by unemployment and they are the future. Drivers of the economy.

South Africa, having recognised the potential contribution that SMMEs can make to the growth of the economy, have put into place several initiatives that are mainly for the support of SMMEs owned by previously disadvantaged individuals, including youth. Therefore, given the potential for entrepreneurship to help in alleviating

dire circumstances of especially rural areas and the fact that there are support measures that are available to support individual entrepreneurs there are still low rates of start-up entrepreneurial ventures in the country (Herrington, Kew & Alasamo, 2019). Therefore, the primary purpose of the study was to analyse the entrepreneurial tendencies of the grade 12 learners who were registered in business studies at the time of the data collection for the study; to evaluate whether they intend to start their own businesses or not. If they do not intend to become entrepreneurs, find out what their fears are that hinder their entry into the entrepreneurial world. Focusing on young people make sense because 1) they are faced with higher than average unemployment levels as already stated, 2) they are the future of the country's economy and 3) they are the highest in numbers, - constituting over 35% of the total South African population (StatsSA, 2019).

## **THE IMPORTANCE OF ENTREPRENEURSHIP**

It has been well documented that entrepreneurship and SMME ownership are key to developing economies of the world and contributing to their Gross Domestic Product (GDP) (Rungani & Potgieter, 2018). The countries that have made effort in promoting entrepreneurial and SMME growth have seen significant growth in their economies. The importance of small businesses in the economy has been convincingly documented by policy makers, researchers and economists for many decades (Kongolo, 2010; Rungani & Potgieter, 2018). In South Africa, it has been estimated that 90% of all formal businesses are SMMEs (Smit & Watkins, 2012). According to the Small Enterprise Development Agency (Seda) Report (2016) "SMMEs have the power to completely change the dynamics of the country's employment rate because they are able to drive innovation and job creation" (p.2). According to Brière, Tremblay and Daou (2014) the creation of sustainable small businesses with strong human and social capital will be of benefit to South Africa, since it will foster economic growth and job creation and promote wealth distribution, leading to poverty reduction. Across the globe, SMMEs have contributed to several economies. Entrepreneurs create economic growth in their communities by forming new products and/or new firms, which in turn create jobs, intensify competition, and may even increase productivity through technological change (Henderson, 2002).

South Africa is one of the countries where several support initiatives have been implemented since 1994 in order to boost the economy through support of development and growth of entrepreneurship and SMMEs (Brière, Tremblay & Daou, 2014). SMMEs are important to the development of the South African economy and in solving the unemployment of especially the youth (Raduan, Kumar and Yen, 2006). Given the importance of small businesses to the world's major economies the importance of enterprise education as a catalyst for new enterprise start-up cannot be emphasised enough (Jones, Packham and Miller, 2008). This highlights the importance of support for young entrepreneurs. Therefore, finding out their entrepreneurial intentions, or lack thereof, can help in highlighting what needs to be done to encourage a mind set of entering into entrepreneurial ventures to create employment instead of expecting to be employed.

## **THEORY OF PLANNED BEHAVIOUR**

It has been proposed that the theory of planned behaviour is a precursor of entrepreneurial behaviour. According to the theory individuals participate in undertakings, that may include initiating an entrepreneurial venture, as a intentional action which is reproduced according to their intention to perform this behaviour (Ajzen, 2015). This implies that before individuals engage in any action or behaviour there is involvement in pre-thought and planning for that action. There are some components that interplay to determine intentions within the planned action theory realm. These include an individual's attitude towards the intended behaviour, subjective norms as well a perceived behavioural control. These factors are "claimed to capture how hard people are willing to try ad of how much effort they are planning to exert, in order to perform the behaviour" (Tsordia & Papadimitriou, 2015: p.25). Attitude towards behaviour is understood to be the extent to which and individual has a positive or unfavourable appraisal of the behaviour that is expected to be performed, like entrepreneurial behaviour (starting a business). "Attitude towards entrepreneurial behavior refers to the difference between the concepts of a personal desire to become self-employed and the desire to work an employee" (Tsordia & Papadimitriou, 2015: p.25). Subjective norm denotes the apparent social pressure to accomplish an action that is being monitored by others. Subjective norms in this context implies that the opinions of the significant people in an individual's life is crucial in whether that individual will choose or have the intention to be entrepreneurial. Perceived behavioural control refers to the extent to which and individual controls

their beliefs about the action they are about to perform like entrepreneurship (Ajzen, 2015; Tsordia & Papadimitriou, 2015).. Within this context, individuals will intend to be entrepreneurial if they have some basis that can help with them heaving a positive attitude towards entrepreneurship, they have the support from the important people in their lives and they feel they can control their behaviour. The intention to be entrepreneurial can be difficult to be a reality for black children from rural South Africa as they have very few successful entrepreneurs who can act as their role models and support them.

## RESEARCH METHODOLOGY

A quantitative research design was followed for purposes of this study. A questionnaire that was based on the General Enterprising Tendencies (GET) questionnaire was designed and administered to all 170 grade 12 learners doing business studies in rural high schools in one district of Limpopo Province. The learners were visited in their schools and their teachers assisted in collection of data using designed questionnaires. The questionnaires had four sections on viz.: 1) the biographical information of the participants; 2) The General Enterprising Tendencies (GET) Questionnaire; 3) Questions on the participants' intention to engage in entrepreneurial activities; and 4) Questions on whether they know the South African government's support measures for young entrepreneurs. The GET is a standardised questionnaire that was developed by Caird and Johnson in 1987-1988 to measure enterprising tendencies (Caird, 2013). According to Caird (2013) "the description of the enterprising person is drawn from what is known about entrepreneurs; the idea being that the enterprising person shares entrepreneurial characteristics" (p.5). The GET describes five basic qualities of an enterprising person, viz. having the 1) need for achievement; 2) the need for autonomy; 3) willingness to take calculated risks; 4) with a creative tendency; and 5) an internal locus of control. The questionnaire has since been used in a few research studies and been found to be a reliable measure of enterprising tendencies and that its results correlate well with measures of entrepreneurial attributes and capacity (Cromie & Callaghan, 1997; Kirby & Ibrahim, 2010). It is the same questionnaire that is basically used for the current study to measure entrepreneurial tendencies of the high school learners in the selected area. The results of the study were analysed using the IBM Statistical Package for Social Sciences (SPSS) was for frequencies as well as comparison of performance according to gender.

## DISCUSSION OF RESULTS

### Biographical Information of the Participants

The number of participants who participated in the study is 170, and all of them were doing grade 12 in high schools located in one rural educational circuit in Limpopo Province of South Africa. Although 170 participants completed the questions, only 163 indicated their gender. Of those who indicated their gender male participants formed 49.8% while females represented 50.3% of the participants. Most learners in this study were in the age grouping of 17-19 (50.0%) followed by age group of 20-22 (42.4%). Only 1.2 % of the participants were in the age group of 14 to 16 years with about 5.9% 23 years and older. The fact that close to 50% of grade 12 learners in the area, were over the age of 19 years should be a matter of concern as it shows that these youth are delayed in terms of the level of education where they should ideally be according to their age. According to the South African Schools Act No 84 of 1996 children are admitted to grade 1 at the age of 7 years and should ideally be 18 years old when doing grade 12.

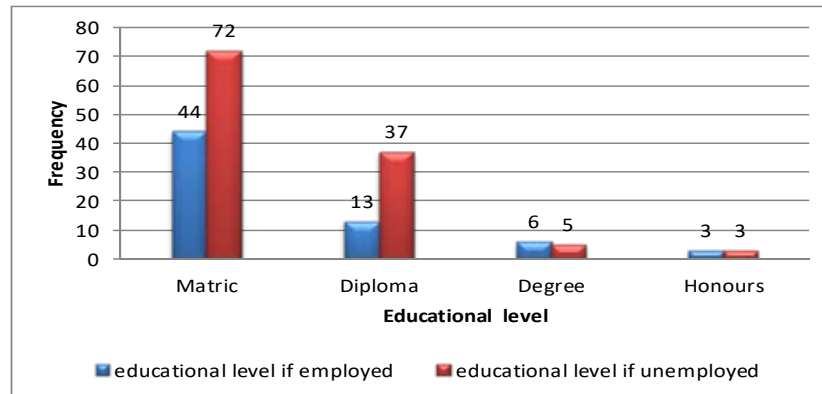
**Table 1: Distribution of participants by age.**

Age	Frequency	Percentage
14-16	2	1.2
17-19	86	50.6
20-22	72	42.4
23 and older	10	5.9
<b>Total</b>	<b>170</b>	<b>100</b>



The results suggested that most of the participants' parents (65%) were unemployed, only 32% were employed and 3% were self-employed. Of the parents who were employed 66.7% had matric (high school) as their highest level of education, while 19.7% had post high school diplomas, 9.1% had university degrees and 4.5% had up to honours level qualifications. Of those parents who were unemployed the results indicated that 31.6% of them had below and up to matric level of education, 4.3% had a post high school diploma and 2.6% had a university degree. The figure below demonstrates the comparison of educational level for parents if employed versus the unemployed.

**Figure 1: Educational level of parents compared to when they are employed vs when unemployed.**



The results in the study suggest that education does help in getting employment, which is in agreement with what previous researchers have documented (Erdem & Tugcu, 2012; OECD Report 2015; Riddell & Song, 2011; Zimmer, 2016). Some of the previous studies particularly indicate that if a person were to lose their employment at some point in their lives, getting re-employed would be easier if they have some education. One of the reasons for better education helping with employment is because the educated people have some knowledge and understanding of what the job market needs in terms of skills.

A study conducted in South Africa by Roodt (2018) showed that children from impoverished backgrounds, who had parents with low education levels, fared poorly in measures of school achievement compared to their counterparts. The children in the current study, as shown by the results, came from impoverished families most of their parents were unemployed with low education levels as shown in the figure above.

## Entrepreneurial Tendencies of the Participants

The participants' entrepreneurial tendencies of the need for achievement, the need for autonomy, calculated risk taking and locus of control are presented as measured by the GET.

**The need for achievement:** Overall, it appears that there is some tendency for the participants in this study to have the need for achievement. From the responses that learners in the study can defend their point of view when they believe in what they are saying, they like keeping time, they are focused and are willing to work hard, and are also willing to work with anyone to achieve their goals. However, they are not willing to take responsibility. According to Rishipal and Jain (2012), the need for achievement, which is linked to taking risks, is a crucial attribute for successful entrepreneurs.

**Need for autonomy:** The results suggest that the learners in the study do not like to work independently and therefore lack the need for autonomy. According to van Gelderen (2011) autonomy is one of the most important factors that motivate individuals to initiate entrepreneurial ventures as it is accompanied by the need to work in a flexible environment with flexible time parameters. Autonomous people also tend to be innovative, independent and self-reliant and can tackle tasks without needing constant help and approval from others (Kusumawardhani, McCarthy, & Perera, 2012; van Gelderen, 2010; Voß, 2017).

**Creative tendency:** The learners indicated that they can trust with and work with their intuition, they are able to synthesise ideas and knowledge, can make good conjectures when necessary and would prefer to be good at several things rather than very good at one thing. Therefore, they showed the tendency towards creativity. Researchers have documented that creativeness is one of the most important attributes of entrepreneurs as it brings about new products

or new ways of doing things, which are issues that can give any business a competitive edge (Kusumawardhani et al, 2012; Voß, 2017).

**Calculated risk-taking:** The results show that the majority of the participants are not willing to take risks by for instance, gambling with their money. Not being willing to gamble with their money is linked to fear of losing what little money they or their families have saved, which implies a link with their impoverished state. They also appeared to prefer a job with a secure income than the uncertainty, i.e. the risk that is associated with entrepreneurship. These kinds of responses demonstrate that learners cannot try to survive in unfamiliar circumstances that are often associated with entrepreneurship. However, the results indicated that they would be willing to invest their time and money if they were sure of the returns, not where there is uncertainty and unknown risk. According to some researchers propensity to take risks in entrepreneurial ventures is crucial (Antoncic et al, 2018; Rishipal & Jain, 2012). In addition, no business can survive if the entrepreneur is not willing to take any calculated risks.

**Locus of control:** The responses of the learners in the study suggest the participants have the internal locus of control as displayed by their self-confidence, their belief that they have control over their destiny and can create their own luck rather than being controlled by fate. The results show that the participants have determination and express a strong will and control over life. In their study, Kroeck, Bullough and Reynolds (2010) found that individuals with a strong internal locus of control, who believe that they have control of their circumstances, tend to do well in entrepreneurial ventures. Hermanawan, Soetjpto and Rahaya (2016) stated that individuals who have an internal locus of control tend to succeed as entrepreneurs as they have an inclination to be self-motivated, a trait that is important and is also linked to the need for autonomy.

In summary, the learners' responses suggest that they have the entrepreneurial characteristics of the need for achievement, creative tendency and internal locus of control. However, they seem to be lacking in the need for autonomy as the willingness to take risks.

## Comparison of Entrepreneurial Attributes According to Gender

The study used the Chi-square test to test if there are any differences between female and male participants on their entrepreneurial tendency attributes.

**The need for achievement:** According to the results, male participants have more need for achievement than the female counterparts. The female participants particularly indicated that they would not mind routine unchallenging work if the pay was good implying that males can live with lack of structure better than their female counterparts. The difference was significant at 10% confidence level as depicted in table 2.

**Table 2: Comparison of the need for autonomy by gender.**

	Value	Df	p-value
Pearson Chi-Square	7.202	3	0.066
Likelihood Ratio	7.482	3	0.058

**The need for autonomy:** The results show that overall there is little proclivity toward the need for autonomy. However, girls tend to have that need for autonomy more than boys although the difference was not significant.

**Creative tendency:** The results in this study (as depicted in table 3) suggest that males are significantly better able to work in situations that are not structured, as typical in entrepreneurial ventures, as compared to their female counterparts.

**Table 3: Comparison of creative tendency by gender.**

	Value	Df	p-value
Pearson Chi-Square	9.884	3	0.020
Likelihood Ratio	10.137	3	0.017

**Calculated risk-taking:** The responses show that both males and females lack the risk-taking characteristic and there were no significant differences between them.

**Locus of control:** The responses show that the learners, males and females, have an internal locus of control with no significant differences between the two groups.

## Intentions to Start a Business after Finishing Studies

When the participants' were asked about their intentions to start their own businesses after completing their studies, 63% indicated that they would like to start businesses when finishing school whereas 37% showed no intention nor interest of ever venturing into business. The study went further to compare the responses by gender and found that more boys showed intention to start their own businesses compared to girls. However, the differences were not significant as presented in table 4. Only 161 of the participants answered the question.

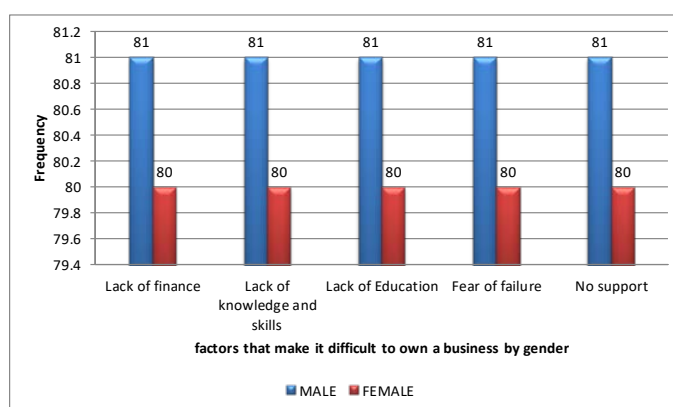
**Table 4: Participants' intentions to start their own businesses after finishing school compared by gender.**

Gender	When you finish school would you like to start a business?		Total
	Yes	No	
Male	54	27	81
	33.50%	16.80%	50.30%
Female	48	32	80
	29.80%	19.90%	49.70%
Total	102	59	161
	63.40%	36.60%	100.00%

## Factors that Would Hinder the Success of Their Businesses Should They Venture into Business

The participants were asked to list factors that they think would hinder their endeavours to start their own businesses. The factors mentioned included lack of finance, lack of business education and/or knowledge, no envisaged business support from significant people in their lives as they would not believe that they could make it in business. They also mentioned that they would not know how to start their businesses, apply for finance or register their businesses, and mostly, they mentioned fear of failure. The hampering factors are depicted in the table figure below.

**Figure 2: Factors that would hinder business success compared according to gender.**



Giving a lot of thought on factors that may possibly hamper the success of any business initiative and perhaps even dwelling on those thoughts can unfortunately be a hampering factor in and of itself.

## Knowledge of the Country's Business Support Initiatives

The participants were also asked whether they were aware of the business support initiatives that are available in South Africa for especially previously disadvantaged individuals. These support structures include those initiatives that are specific for youth. Only a few participants knew of those support structures. Of those who knew of them, more males were aware than females. Those who knew of them also added that they were not aware of the exact services rendered by these organisation and they would not know how to access them.

## CONCLUSIONS

The study focused on the entrepreneurial tendencies amongst grade 12 business studies learners in rural schools of Limpopo Province. Entrepreneurship plays a significant role in communities in terms of economic growth and offering employment opportunities to local community members. The learners or the students with entrepreneurial spirit can be seen as the hope that constitutes the potential driving force behind the success of their communities and support is needed in the form of education and finance in order to overcome the existing obstacles and barriers to youth entrepreneurship. However, with little proclivity towards entrepreneurship as well as lack of intention to enter into entrepreneurial ventures that hope will only be a pipe dream. Very few learners in the current study showed intention or interest to start their own businesses. Given the high unemployment levels in the country, especially of youth, it is very disturbing that there is low entrepreneurial intention amongst youth. This is a factor that was also described by Herrington, Kew and Mwanga (2019). In addition, although they showed entrepreneurial characteristics of the need for achievement, creative tendency and internal locus of control they still lacked the traits of the need for autonomy as well as the willingness to take risks.

Boys seemed to have better entrepreneurial attributes and tendencies, as well as interest than girls. Unfortunately, the participants readily identified factors that they thought would be instrumental in hampering their starting their own businesses. This may be indicative of the fear in starting own businesses versus the security of being employed.

## RECOMMENDATIONS

Following the results of the study it is recommended that cultivating entrepreneurial interest, tendencies and intention should be a concerted effort at different levels and from different sectors in the country.

- Support to motivate and cultivate interest in entrepreneurship: the participants show some entrepreneurial attributes and interest although apparently not enough. Therefore, it is recommended that literate, successful community members, as well as employed and self-employed parents provide guest talks and guidelines to encourage the youth to start thinking about possibilities of entrepreneurial initiatives and self-employment versus being employed from a young age.
- Small business owners should be visible and be more accessible to aspiring entrepreneurs. Their visibility will help in making youth aware that business is something that can be done and that there are people who have made it. These successful business owners should also be encouraged to mentor and coach youth to start and grow their own businesses.
- Education and training: It is further recommended that modules and curricula of business studies, as well as the educators consider emphasising the importance of entrepreneurship. There is a need to disseminate information to learners on how entrepreneurship can help improve the standard of living in the communities, with special emphasis on job creation and economic development of especially rural areas. Information that may be included in the teaching of entrepreneurship and small business management should include designing business plans, marketing skills as well as bookkeeping skills. The education and training should also focus on:
  - The support institutions and initiatives that are available to assist South Africans, especially youth in starting and maintaining their own small businesses. This education should also give the up-to-date information on these institutions. Knowledge of these institutions will help in terms of the youth knowing where and how to access finance and where to get support in terms of getting skills on running small businesses.

- Communication skills on how young entrepreneurs (aspiring ones as well) can present themselves especially to potential funders when asking for financial assistance or in terms of outlining their business idea(s).
- Making youth aware of the possible risks and benefits involved in starting an own business versus the security of being employed, as well as the need to take responsibility and be creative and initiative.
- Leadership skills as these will help in building positive relationships with various stakeholders in businesses and communities.

Researchers have shown that lack of business management skills that include financial management, marketing management and managing people are some of the factors that can hamper the success of new small businesses (Ngorora & Mago, 2013; Agwa-Ejon & Mbohwa, 2015). In that sense it is recommended that:

- Schools and institutions of higher learning should teach business management skills including teachings on how to draw convincing business plans and present own business idea. These teachings can be rendered as short courses, to equip aspiring entrepreneurs with such needed skills.
- The SMME support institutions and programmes can help in showing aspiring entrepreneurs the kind of business opportunities that are available, how to register their own businesses and how to access finance for start-up and business growth capital.
- Finally, career guidance programmes in schools should include entrepreneurship as one of the possible options that individuals can follow when they finish school.

On a broader scale policymakers can help in relaxing regulations that restrict SMME entry into the business arena. Investment in rural technology can also go a long way in making rural youth aware of opportunities.

From the study, it can be concluded that the participants still do not have the mind-set, and therefore not the intention, of entrepreneurship versus getting employed. This may be because of the lack of role models who can: firstly, show that entrepreneurial behaviour is a way of life that can be done successfully and improve the economy and the livelihood of individuals and their significant others as well as their wider community; secondly, then support them, i.e. youth who are aspiring to be entrepreneurs by teaching, mentoring and coaching them to believe in entrepreneurship and in themselves and thereby cultivate the mind-set of entrepreneurship as a first option.

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# THE EFFECTS OF FINANCIAL LITERACY ON FINANCIAL MANAGEMENT OUTCOMES: EVIDENCE FROM THE SOUTH AFRICAN EMPLOYED YOUTH

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## ABSTRACT

*Financial illiteracy is one of the aftermaths of imprudence financial mismanagement practices that are common among the South African youths. The empirical strategy adopts a logistic multivariate regression model. The findings on the overall financial literacy of the South African youth showed that, employed youth in all provinces have inadequate or low financial management skills with an overall mean correct percentage score of 80.69. In general, South African youth that have better information on personal finance tend to have better financial outcome.*

**Keywords:** Financial literacy, financial management, logit model, South Africa, OLS, Saving, Investment.

## INTRODUCTION

In South Africa, there exists the quest for financial literacy to promote inclusive growth in the country. According to the Financial Sector Conduct Authority (FSCA) in 2011 and the Association for Savings and Investment South Africa (ASISA), promotion of consumer awareness, education and protection is essential. Thus, when the economy is not strong, the individual's adequate financial knowledge and skills to survive are required (Fatoki, 2014). The individual household strives to find a balance between meeting the immediate demands and saving for the future needs. Most individuals are faced with having to meet the most basic needs such as education costs, housing, transportation and health care (Atkinson and Messy, 2012). To achieve good financial management, appropriate planning and budgeting are needed. Planning, budgeting and calculated spending are termed as financial literacy (Lusardi and Mitchell, 2006).

This study is motivated by the overwhelming spending behavior of the South African youths, without the corresponding curiosity to invest. For instance, about 37 percent of the 33 million South African adults were financially excluded in 2010 (OECD, 2013). Financial inclusion has become a crucial matter in South Africa because, as indicated by National Treasury (2011), a large number of South Africans are not registered with the financial service providers. To this end, this study examines the understanding and knowledge of financial management, saving and borrowing.

## LITERATURE REVIEW

### Knowledge, Skill and Attitude

The United States Financial Literacy and Education Commission (2007) describe financial literacy as the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being. Knowledge involves having an idea of your financial needs through extensive research and obtaining the most cost-effective means of meeting these needs for a long time. This could be in form of saving money in a bank account to earn interest, investing to accumulate funds or, even, reducing the amount of spending. Similarly, financial accomplishment refers



to the set of ability, and data that permits a person to form a call that are integral to their everyday life. It is also the ability to use that information in order to manage financial resources effectively for a lifespan of monetary well-being (Hilgert et al, 2003; Mandell, 2004). The private desires and experience will be the proper determination of financial literacy accomplishment to own a positive impact on shoppers' personal involvement in financial market and services. Finance is an integral part of our everyday life. Therefore, being financially literate is useful to shoppers because it helps them to arrange and allow their expenditures. In addition to the foregoing, it encourages them to save and invest with lots of their cash. This helps them manage their finances responsibly, hence, achieve a lifespan of financial well-being. Huston (2010) describes financial literacy as "measuring however well a person will perceive and use personal finance-related information". This implies that it supports the individuals' financial situation, taking into consideration their outlay, personal wants and funds obtainable to them. They are able to work out, as effectively as possible, the budget as to the amount to be spent by them so as to meet their needs. Financial literacy gives a person the power and the confidence to use financial information to form financial decisions. This can be imperative so that people have associate remarkable degree of information of finance so as to form financial decisions (such as spending or investing with their funds) as well as execute their financial decisions effectively.

Lusardi and Mitchell (2011) and Ludlum et al., (2012) assert that financial skill will facilitate the boosting of saving behavior, wealth accumulation, retirement designing and debt management. Once people have the relevant knowledge of their financial matters, they're less doubtful to expend their cash recklessly. Therefore, they have much chance to accumulate wealth through saving and investing with their obtainable funds.

Financial literacy, in the study of Malaysia, was defined as the way people manage their money in terms of insuring, investing, saving and budgeting (Hogarth, 2003). Financial activities, can be studied in relation to how financially literate individuals are and what their attitude is when it comes to their planning out their finances. Financial capability, or literacy, is determined by experience, expertise and person's needs, and can have a positive impact on consumer's personal involvement in financial markets and services. The more experience an individual has when it comes to planning and managing his finances, the more financial expertise he acquires. Thus, it is more likely for one to pursue the right financial decisions and fulfill one's personal needs. This result in an individual's being more open to taking risks and investing his funds in financial markets.

Financially literate people don't spend their money recklessly or investing funds where the possibility of generating returns is very slim. To invest in a worthy project, reliable information would have to be obtained in order to make an informed decision. Individuals are able to effectively budget and plan for their future in relation to how they can spend their money, how they can bargain and save, the kinds of product they need, how and where they can efficiently obtain them as well as keep track of them. This shows that they have a certain level of knowledge and skill on how to manage their finances.

Financial literacy can help to prepare consumers for tough financial times, by promoting strategies that mitigate risk such as accumulating savings, diversifying assets and purchasing insurance. Financial literacy also helps to improve behavior such as the avoidance of over-indebtedness. Financial literacy enables people (individuals and business owners) to make better financial decisions and to understand and manage risk. Financial literate consumer and business owners help to enforce competitive pressures on financial institutions to offer more appropriately priced and transparent services because they have the relevant knowledge of how financial markets operate. Financial literacy permits folks (individuals and business owners) to form higher financial decisions and to grasp and manage risk.

## **RESEARCH METHODOLOGY**

The study used secondary data that was collected by Human Science Research Council in South Africa's for the nine provinces. The 2012 South African Social Attitude Survey from Human Science Research Council (HSRC) data was used for this study. About 364 respondents were accounted for their information on knowledge of personal financial management, savings and investment, borrowing, expenditure and insurance. The demographic section has been analyzed by Statistics Packages of Social Scientist (SPSS 25) programme. The results showed that respondents that took part in the questionnaires came from different provinces. The variables then tested with Pearson correlation coefficient to test the significant and relationship on the dependent variables with financial literacy. This database has

all the variables that are aligned with the objectives and question for this study. The survey covers questions related to the financial literacy, savings behavior, and investment decision making process of respondents. The only challenge that was uncouncted but rectified in this survey results was that the age categories did not align with the target age categories of this study which is 18 to 34 years. The researcher re-categorized the age grouping and only uses responses of the target group in line with this proposal.

This study follows quantitative approach. Quantitative approach is considered as it caters for greater accuracy and objectivity of the results and minimizes biases, thus producing real and unbiased results. The quantitative study is conducted in such a way that enables other researchers to get similar results when repeating a certain analysis as it uses mathematical and statistical methods for measuring data. Taking into consideration voluminous data that was collected, the quantitative approach makes it easier to summarized large information in a form of response and presents the major findings (Galt et al., 2008).

Logistic regression model was performed to assess the impact of financial literacy on attitudes towards individual savings and investment decisions. Logistic regression also generates the coefficients of a formula to predict a logistic transformation of the probability of the presence of the characteristics of interest and uses the equations 1-11 to generate coefficients with standard error and significance levels to predict a logit transformation of the probability of occurrence of the variables of interest. The modelling approach considers financial literacy as a dichotomous independent variable, which takes “1” if the literate youth saves/invests “0” otherwise. Information on literacy has been said to be the basis for sound saving and investment, thus it is the dependent variable and the dependent variables are saving and investment patterns along with other relevant variables. The value of testing the hypothesis is that the findings with financial institutions and individuals reflect on the level of financial literacy amongst the youths and how it affects their perceptions about, use of, and relationship with money. The independent variables are the amount saved and invested income level, gender, educational status and employment status.

The model employed in this study is logistic regression and the outcome variable  $Y$  is the probability of having one outcome or another based on a logistic function of the best linear combination of predictors, with two outcomes. The ordinary least square (OLS) model is specified as;

$$FM_i = \alpha_0 + \alpha_1 FL_{IS}_i + \alpha_2 E_i + \alpha_3 r_i + \alpha_4 S_i + \alpha_5 LS_i + \alpha_6 H_i + \alpha_7 P_i + \varepsilon_i \quad (1)$$

where  $FM$  is Financial Management outcomes;  $FL_{IS}_i$  describe financial literacy,  $E_i$  is education attainment of individual household;  $S_i$  is sex or gender;  $LS_i$  is life satisfaction,  $H_i$  is the household size;  $P$  is the provincial location;  $\varepsilon_i$  is the error term.

## EMPIRICAL ANALYSIS

This section presents data analysis and findings made based on questions that individuals answered in the South African Social Attitudes Survey 2012. Table 1 represents the descriptive statistics; the average age for the observation in the sample is 18 to 34 years, especially for the South African youths. Standard deviation is a measure of quantifying variation of the dataset. Low standard deviation indicates that the data points tend to be close to the mean of the set, and the high standard deviation indicates that the data points are spread out over a wider range of values.

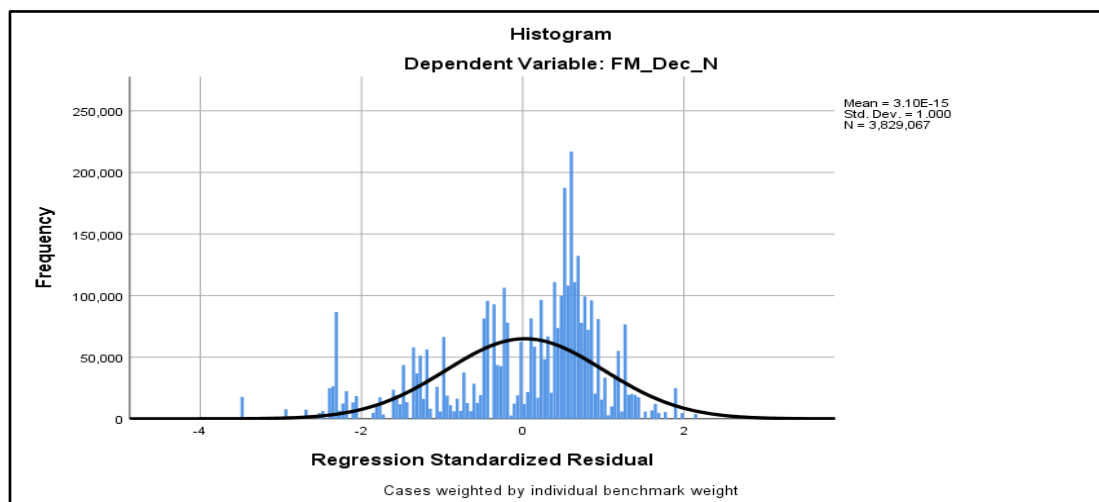
**Table 1: Descriptive Statistics.**

Variable Description	Minimum	Maximum	Mean	Std. Deviation
Household Size	0.00	4.00	1.20	1.06
Financial Literacy	0.00	1.00	0.39	0.29
Financial Management Decision	0.00	1.00	0.78	0.29
Sex (Gender)	0.00	1.00	0.67	0.47
Living Standard	1	3	2.09	0.57
Education	0	9	2.67	1.27

Personal Income	1	98	22.05	34.19
Household Income	1	8	1.87	1.49
Age	18	34	28.80	4.05

Source: Computed from database

**Figure 1: Standardised Financial Management Decision Variable.**



Source: Computed from database

The above figure 1 shows that financial management decision variable is standardised and evenly distributed for individual effect. This is in line with what Delafrooz and Laily (2011) find about saving behaviour is significantly influenced by the financial literacy whereby individuals with low level of financial literacy may not save. The future consequences for imprudence can be financial challenges.

**Table 2: Regression Results: Financial management decision and financial literacy.**

Dependent Variable: Financial Management Decision regression		Method: Logistic	
Explanatory Variable	Co-efficient	Std.Error	Prob.
C	0.18	0.001	0.000
Financial literacy	0.11	0.000	0.000
Household size	-0.003	0.000	0.000
Sex	0.08	0.000	0.000
Education	0.02	0.000	0.000
Living Standard	0.14	0.000	0.000
$R^2 = 0.44$ F-Statistic = 118013.970 Prob. (F-Stat) = 0.0000 Std Error of the Estimate = 0.22			

Source: Computed from database

With the analysis of the above estimation, there is a positive and significant relationship between financial management outcome and financial literacy, gender, race, educational attainment and living standard. But financial management outcome has a negative and significant relationship with household size and provincial areas. The adjusted R-squared value reveals that 20 percent variation of financial management outcome is caused by the independent variables. Hence, there may be need for future research in this area to investigate the effect of unexplained factors. The regression analysis confirms a priori expectation, that is, there is a positive relationship between financial

literacy and financial management outcome. The standard error estimated value of financial literacy and financial management outcome shows that it is statistically significant at 5% level. Also, in relation to second order test, F-statistics is statistically significant at 95 percent level. Therefore, financial literacy has influence on financial management decision. Indicators exerted on sustainability were found to be significant based on the F-Statistic result.

## SUMMARY AND DISCUSSIONS

From the outcome of the research, it is observed that participants are dominated by males who constitute higher percentage, while their counterpart females constituted lower percentage. In terms of provinces, Gauteng (GP) is rated higher with 22.2 percent followed by Kwa- Zulu Natal which is 18.1 percent. The third one is Western Cape with 12.7 percent of population per province while Northern Cape is rated lowest with 2.3 percent. However, the outcome on financial management per province shows Gauteng as the highest. It is followed by Kwa-Zulu Natal and the lowest is Northern Cape. Kwa- Zulu Natal and Gauteng provinces have the largest size in both economy and population. From a simple empirical investigation of financial literacy and financial management, the results show that most of South Africans have borrowed money for consumption purposes such as food, water and electricity, gifts for the other people, impulse purchases, supporting people outside one's household or lastly paying off existing debts among others. Only fewer South Africans have savings that would be able to cover their expenses for few months. The rest of the population will not be able to cover their debts whether an economic shock or financial setback arises. The analysis of this data was conducted in two phases. The first one relies on descriptive statistics which provides insight into the relevant financial management outcomes. Regarding the analysis that was conducted on the research question, it can be concluded that financial literacy has effect on financial management outcome. Hence, it is obvious that there is unexplained behavioral factor that culminates in financial management outcome. Most South Africans have knowledge about saving and investment but they have not increased it. However, from the second estimation, the research hypothesis states that financial literacy does not have significant effect on financial management outcomes.

In addition, financial literacy queries careful consideration affordability before purchasing an item. Most respondents confessed they don't always consider affordability before purchasing. Affordability consideration is arguably the most consistent influence on the relative odds of savings and investment outcomes are the extent of research before obtaining financial product and the general awareness of financial products. Also, financial literacy queries paying bills on time while most of the respondents answered that they do not pay bills on time. This indicated poor financial literacy and management as paying of debt late is one of the main reasons for credit blacklisting in South Africa.

Further results show that the associated independent variables influences the relative odds of savings related outcomes much more than they do debt-related outcomes. Individuals with good financial literacy are more than twice as likely as someone with poor financial literacy by not having any 'non-ideal debt'. In fact, an individual with good financial literacy is almost four times as likely as someone with poor financial literacy by saving from their income. Even those individuals with only a reasonable level of financial literacy are still almost three times as likely as to 'save from their income' as someone with poor financial literacy. Furthermore, considering the fact that the typically non – significant predictor element of financial product choice and of financial knowledge and understanding are included in the overall financial literacy score, it is worth noting the considerable effect that this variable has on the relative odds of the savings related outcomes. This effect is even more profound when one disregards the top categories of the income and education variables- categories that include only a small portion of the population. The findings on the overall financial literacy of the South African youths show that, generally, individuals in all provinces have inadequate or low financial literacy with an overall mean correct percentage score of 80.69. However, the individuals illustrated some appreciable financial knowledge on savings and borrowing. These findings on the assessment of individual in relation to examining their understanding and knowledge in money management, savings and borrowing, investment, insurance and retirement planning show clearly that individuals lack some basic financial literacy skills.

Based on the level of provinces, the first one with the highest percent of financial management is Kwa Zulu Natal Province. This is followed by North West, (NW) while Gauteng Province comes third. Although Gauteng has a higher GDP per capita, this does not equate to its residents having better financial management rating. As such, we

can conclude at this stage, based on this evidence that the overall provincial GDP per capita is not equivalent to the province's residents' financial management skill.

The province with lower percent on financial management is Western Cape (WC). Similar to Gauteng, Western Cape Province is one of the richest provinces in South Africa (Nag 2018). However, the province ranks lower in its citizen's financial management skills. Although there have been some shifts for regional salaries across the different categories. Gauteng, KZN remains the highest paying province for most categories, while Western Cape remains the same Department of Public Services and Administration (DPSA). Northern Cape had a smallest number of respondents; however, it shows to have higher financial management skills than some of the big province. The size of the respondents could be responsible for the higher rating as there could have been concentrated instead of spread-out financially skilled respondents.

## **CONCLUSION AND POLICY IMPLICATIONS**

The study tested the hypothesis and it confirmed that financial literacy has significant effect on financial management outcomes. As shown in Table 2, the other explanatory variables included in this study have also significantly affected the dependent variable. In addition, the lack of adequate financial knowledge (education) in the long run has far reaching consequences on the individual as it is observed that the knowledge on savings and investment is not good and encouraging. For a long term, it will limit participant's financial decisions making and planning. The findings of the study are also important for policy makers. Having identified that financial literacy is important for the South African youths to maintain an effective saving behavior; it becomes clear that increasing financial literacy will enable them to manage their money effectively. This finding corroborates with the findings by Falahati (2011) and Fatoki (2014).

To sum up, it is important for policy makers to develop an effective education programme based on the needs and financial literacy level of the youths. The education programme should focus on improving the youths' basic financial knowledge and skill. However, not all the programmes in South Africa have included financial courses, especially non-business programmers. Hence, organizing seminars or workshop can be an alternative manner for improving the youths' financial knowledge, attitudes and behavior. Besides, providing effective financial education before starting to work could mitigate the bad financial habits and attitudes of the youths and, at the same time, decrease the rate of default in payment of personal loan.

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# TOWARDS A CLEANER AND MORE SUSTAINABLE ELECTRICITY SUPPLY CHAIN IN SOUTH AFRICA

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## ABSTRACT

*The study explored the predominantly coal-based South African electricity supply chain with its aged coal-fired power stations and the stepped-up development of renewable sources of energy. The aim was to establish how the electricity supply chain would be rendered cleaner and more sustainable. The sustainable development theory underpinned the study and qualitative research methodology pursued with participants drawn from public and private electricity producers. The data collected was transcribed, translated, coded and thematically analysed using content analysis. The study established that reduction of carbon emissions by adding renewable sources and the use of clean coal technologies rendered electricity supply chain cleaner and more sustainable.*

**Keywords:** carbon-emissions; coal; electricity-supply-chain; independent-power-producers; renewable-energy.

## INTRODUCTION

Fossil fuels continue to be the leading source of energy in the world with burning of coal at the power stations contributing 41% of the total global electricity generation (World Bank Report, 2015). Coal is also used as a catalyst and coking in heavy industries, space heating and cooking at homes. In South Africa, coal is the primary source of energy contributing 88% of the country's electricity generation and 40% of the national liquid-fuels production (Stats SA, 2014).

South Africa is the 9<sup>th</sup> global leading producer of coal and the abundant reserves in the country could last over 200 at the present rate of production (Baxter, 2015). Coal will remain a dominant source of energy globally for generations in the countries where it is produced (World Energy Council, 2016). The country has one of the largest coal mines and one of the largest coal terminals in the world (Chamber of Mines 2010). The coal produced in South Africa is 75% for domestic market and 25% for export market (DMR, 2009). The government through the integrated resource plan (IRP) 2010-2020 and the National Development Plan (NDP) 2011-2030 (NDP, 2011) hoped to reduce carbon emissions drastically by reducing reliance on coal for the generation of electricity to below 50% by 2030 (DOE, 2018).

The Electricity Legislation Act of 2006 allocated 30% of total electricity generation from renewable sources by independent power producers (IPPs) and 70% to Eskom from coal and other sources (DOE, 2007). Around that period, the country started experiencing electricity supply deficiency with the power outages in 2007/2008 which has persisted up to the present moment. The first quarter of 2019 experienced the longest load-shedding so far (Eskom, 2019).

However, at the time of the first load-shedding in 2007, the government had designed construction of two giant coal-fired power stations, Medupi and Kusile under clean coal technologies (NDP, 2011). Both IRP 2010-2020 and NDP 2011-2030 emphasised on the completion of two giant coal-fired power stations and fast-tracking development of renewable sources of energy by the IPPs. The renewable energy development was supported under the government initiative of "renewable energy independent power producers' procurement programme" (REIPPPP) (REI4P Review, 2014). The theory of sustainable development underpinned the study as renewable sources would be used to continuously provide electricity with reduced emissions.



## THEORETICAL GROUNDING

The theory of sustainable development (SD) underpinned the study, as provided in the United Nations 1987 Brundtland Report on “Sustainable Development” delivered at the United Nations World Commission on Environment and Development (UNWCED). The sustainable development definition stated: “development that meets the needs of the present without compromising the ability of the future generations to meet their own needs” (Brundtland, 1987).

In energy perspective, the theory expressed dilemma of dependence on fossil fuel-based energy sources as it culminated into climate change or global warming phenomenon. Sustainable development stipulated on the choice of “energy with long-term availability in increasing quantities from sources that are dependable, safe and environmentally friendly” (Epstein & Buhovac, 2014).

The theory resonates with the scenario in South Africa where current legislations support development of renewables sources of energy and the use of clean coal technologies to reduce carbon emissions. Hence, development of additional renewable sources of energy, use of clean coal technologies in new coal-fired power stations and pollution control of the old coal-fired power stations would reduce carbon emissions to yield cleaner and more sustainable electricity (NDP, 2011).

## ENERGY CHOICE AND DEVELOPMENT

The 1987 Brundtland Report articulated on among other things the importance of energy for sustainable development and highlighted the dilemma posed by continued use of fossil-fuels (oil, coal and gas). The untapped potential of renewable energy that would drive energy efficiency was stated and that “future development crucially depended on the energy’s long-term availability in increasing quantities from sources that are dependable, safe and environmentally sound” (Brundtland, 1987).

As South African electricity source is predominantly coal, there is urgent need to reduce carbon footprint by incorporating renewable sources and use of clean coal technologies in the new build of coal-fired power stations. According to Organization of Economic Cooperation Development (OECD), South Africa’s coal-fired power stations has thermal efficiency of 39% (World Nuclear Association, 2018). Transforming to clean coal technologies would imply exiting of the older subcritical power stations and building or upgrading them with supercritical and ultra-supercritical technologies that provide high efficiency and low emissions (HELE) (Hitchin, 2018).

South African legislations and regulations that control the electricity industry and the emissions are the Mineral and Petroleum Resources Development Act (MPRDA) of 2002 (DMR, 2002) and the Environmental Management Act of 1998 (DW & EA, 1998). The National Development Plan (2011-2030) and Integrated Resource Planning (IRP) (2010-2020) and IRP (2018-2030) emphasizes on reducing over-reliance on coal and recommends increased development of renewable sources to reduce carbon emissions (NDP, 2011).

## COAL MINING AND CONSUMPTION

The bulk of South African coal is produced by five leading multinational corporations: Anglo Coal, Sasol, BHP Billiton, Glencore, and Exxaro that produce 84% of total produced and the other 16% is produced by small junior mining companies (Oberholzer, 2014). South Africa has the 10<sup>th</sup> largest global coal reserves, 7<sup>th</sup> largest coal producer and 5<sup>th</sup> largest coal exporter in the world (IEA, 2018).

The South African coal production is 75% for domestic market mainly for the generation of electricity and production of liquid fuels and petrochemicals and 25% for the export market. The distribution of the domestic coal consumption is 70% for electricity generation by Eskom, 20% for synthetic fuel production by South African Synthetic Oil Limited (Sasol), and 10% for general consumption (industry, merchants and homes) (DoE, 2011).

## **Electricity Generation from Coal by Eskom**

The Eskom coal-fired power stations are mainly found in the Highveld region in Mpumalanga province where each power station was built next to a coal mine to facilitate use of conveyor belts for coal supply for the ease of transportation costs (Eskom, 2014). This design reduced the generation costs that made South Africa one of the lowest cost producers of electricity in the world for many years before 2007. Since 2007 most of the designated coal mines didn't have enough capacity to supply the respective power stations as coal had started depleting from Mpumalanga area forcing the power stations to obtain coal from the coal mines in the periphery using road transport. The transportation of coal by road increased environmental degradation in air and noise pollution, road damage and road accidents (Prevost, 2010:17).

Eskom has 13 coal-fired power stations with generating capacity of 40 0362MW of non-renewable energy (coal-based), but the capacity has dropped to 34 952MW due to disruptions caused by aging power stations (Eskom, 2018). South Africa continues to experience severe power outages that impacts negatively on the economy in the last decade (Eskom News, 2018). The other attributes of electricity crisis in South Africa are aging infrastructure, operational issues and lack of fresh investments in the sector for over a decade (Xia, 2015). Eskom has planned to decommission five of its fleet of coal-fired power stations by 2023 (Engineering News, 2018).

The government hopes to resolve the complex constraints that Eskom faces by unbundling the utility into three entities: generation, transmissions and distribution to streamline operations (Daniel, 2019). The other intervention measures include expediting the completion of the two new massive coal-fired power stations under construction, Medupi and Kusile designed under high efficiency low emissions (HELE) clean coal technologies and retrofitting the old power stations with bag filters to control emissions (Eskom, 2014).

## **THE DEVELOPMENT OF INDEPENDENT POWER PRODUCERS (IPPs)**

The electricity legislation Act of 2006 ushered in the IPPs to generate 30% of the national electricity from renewable sources of energy (DOE, 2007). The Act was followed by endorsement of the IPPs by (IRP, 2010-2020) and (NDP, 2011-2030) that recommended the procurement of 20 000MW of renewable electricity by 2030, as 11000MW of electricity was being decommissioned from the aged coal-fired power stations in the same period (NDP, 2011).

The government's initiative for "renewable energy independent power producer procurement programme" (REIPPPP) encouraged development of IPPs in the electricity sector to increase the present and future energy mix and reduce emissions (REI4P, 2014). The first phase involved the signing of agreement with 27 renewable energy IPPs in 2018 to add renewable energy to the current installed capacity of 3 544MW of wind and solar power (Engineering News, 2018).

## **CARBON EMISSIONS**

South Africa subscribes to United Nations Framework Convention on Climate Change (UNFCCC) that lead the campaign against the global climate change/global warming phenomenon (UNFCCC, 2009). Adhering to this obligation, the country has an ambitious target of decarbonization of between 3.3% to 5% per annum which translates to 398 MtCO<sub>2</sub>e (Million tons of carbon-dioxide equivalent) (BP Energy Stats, 2015).

Eskom is the leading emitter in the country followed by synthetic fuel producing company Sasol (Mckenzie, 2011). Sasol's Secunda plant at Sasolburg is the leading single carbon emitter in the Southern Hemisphere (Sasol, 2008:36). The government has set emission standards for companies which are heavy in carbon emissions such as coal-fired plants, petrochemicals, cement, smelters and others (DW & EA, 2010).

## PROBLEM STATEMENT

As one of the global twenty polluters, South African coal-based electricity generation require mitigation to reduce carbon emissions to render the electricity supply chain cleaner and more sustainable.

## EMPIRICAL OBJECTIVES

Three empirical objectives were identified and pursued as follows:

- Renewable sources reduce carbon emissions.
- Clean coal technologies enhanced cleaner electricity supply.
- Diversified energy sources enhance electricity sustainability.

## RESEARCH METHODOLOGY AND DESIGN

A qualitative research methodology was pursued in this study seeking to establish a cleaner and more sustainable electricity supply chain in South Africa. Qualitative research aims to generate data from the interviews conducted with the respondents (Lee & Lings, 2008). Research design is about the strategy to understand and pursued to attain credibility of the interviews that lead to realization of acceptable and reasonable outcome (Saunders, Lewis & Thornhill, 2016:166).

In pursuit of the three empirical objectives, speeding up development of renewable sources as an added mix to coal and making use of clean coal technologies to reduce carbon emissions were observed. The impact of multiple sources of energy was also observed. Therefore, exploratory approach of the 16 participants who were senior managers from the electricity supply chain comprising of Eskom, IPPs, coal mines and logistics firms was appropriate.

The participants in the study were 16 senior managers selected from the stated role players from the electricity sector. They were approached via e-mails and telephone through their personal assistants (gate-keepers). A value proposition presentation was provided to the gate-keepers on “establishing how a cleaner and more sustainable electricity supply chain would be achieved in South Africa”. Saunders *et al.*, (2016:222) stipulated the importance of gaining interview access from appropriate sources such as the gate-keepers.

The participants were briefed on the interview duration of 45 minutes, use of semi-structured questions, use of a cell phone as a recording device and a field notebook to record main points. A written undertaking was presented from the sponsoring institution, stipulating the confidentiality, non-disclosure and anonymity during and after the interview. The recorded interview data was transcribed, interpreted, coded and analyzed via content analysis. The major themes and sub-themes that emerged provided the outcome of the study. The interview data, field notebook and the literature were used to ascertain the validity, trustworthiness and triangulation of the study.

## RESULTS

The seven major themes that emanated from the study indicated that renewable sources of energy transformed the coal-based electricity supply chain cleaner with the reduction of carbon emissions and more sustainable as multiple sources don't fail at the same time. in South Africa. The themes comprised coal/coal-fired power stations, renewable energy sources/PPs, carbon emissions, coal mines, clean coal technologies, transformation of electricity sector and legislations. The themes reflected on the objectives that were set for the study and they were achieved as elaborated hereunder:

## **Empirical Objective 1: Renewable Sources Reduce Carbon Emissions (Achieved)**

Most of the participants praised the important role played by renewable sources of energy in carbon emissions reduction, to the current coal dominated source of generation to lower the carbon emissions. The renewable sources in South Africa comprises of solar, wind and hydropower. South Africa being among the global top twenty polluters, the role played by renewable sources in emissions reduction cannot be overemphasized. This was reaffirmed by the remarks of Participant 15:

*“The carbon tax will impact on companies heavily when introduced under the present carbon economy. We should take advantage of the government support in the development of renewables sources as it’s the only mean available to lower carbon emissions”.*

## **Empirical Objective 2: Clean Coal Technologies Enhanced Cleaner Electricity Supply (Achieved)**

The participants emphasized on the global adoption of high efficiency low emissions (HELE) as the future way of reducing generation costs and lowering carbon emissions as coal remained the cheapest resource base. They cited example of the two up-coming Eskom’s coal-fired power stations Medupi and Kusile which were designed under HELE clean coal technologies. They also expressed the importance of having multiple sources of electricity generation, with coal providing the base-load. Nine of them projected reduced reliance on coal in future, as participant 1 stated:

*“I think we are married to coal on a large scale as the country will be using coal in the short to medium term. Coal power is going to be with us for many, many, many years to come and so having to take out coal from the system, I don’t think it will happen any time soon.” Coal use will actually continue to be reduced but can’t be stopped because it’s cheaper raw material”.*

## **Empirical Objective 3: Diversified Energy Sources Enhance Electricity Sustainability (Achieved)**

Multiple sources of energy were observed to have advantage over a single source as multiple sources cannot fail at the same time. They referred to the current power outages caused by breakdown of the aged coal-fired power stations and coal shortages. The increased development of renewable sources appeared as the solution to the persistent power blackouts. Eleven of the participants concurred that multiple suppliers were more likely to negotiate for a better prices and terms of service as opposed to a single supplier. The participant 3 remarked:

*“Finally, the state monopoly has come to an end we hope to get better tariff as more renewable energy comes onstream. Eskom has been reluctant to sign in completed energy projects, but that’s fear of competition. We can also develop coal power plants using clean coal technologies if the government allows”.*

## **CONCLUSION AND RECOMMENDATIONS**

The exploration of the energy industry and the stakeholders, development of the renewable sources of energy, legislations and regulations for the industry was conducted. The Eskom reduced generation capacity, operational and emissions issues were reviewed. The study was grounded in sustainable development theory, qualitative research methodology pursued, three empirical objectives set-up and achieved. The coal mining and electricity generation from coal-fired power stations and the increased energy mix with renewable sources were explored. The new coal

technologies under HELE and examples of application at Medupi and Kusile coal-fired power stations under construction were provided. Subsequently, the national energy policy supporting addition of renewable sources to coal under the National Development Plan (2011-2030), IRP 2010 and IRP 2018-2030 were reviewed.

The recommendation is for the government to fast-track the review of the cumbersome MPRDA Act to attract investments in energy sector for both non-renewable (coal) and renewable sources of energy. This would facilitate investment in new coal mines to adequately supply the present and future coal-fired power stations under HELE clean coal technologies and accelerate development of IPPs for renewable energy.

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# UNIVERSITY RESPONSIVENESS TOWARDS DECOLONISATION IN THE SOUTH AFRICAN HIGHER EDUCATION

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## ABSTRACT

*Decolonisation in higher education is an inevitable and highly debatable discourse by scholars in South Africa and abroad. The intention to decolonise the higher education system is to reject the hegemony of the Western and European knowledge systems and to integrate the African and indigenous knowledge systems and culture into the higher education core business. This paper argues that universities must move towards a congruent and borderless notion of higher education and be responsive to the needs of the society. Education and decolonisation in South Africa should embrace the notion of diversity in response to the contextual differences and realities permeating the local landscape which in itself is longing for engagement and interrogation so as to drive decolonisation and development. This theoretical paper is engaging the context of university responsiveness in as far as teaching and learning, community engagement and research. Lessons learnt from this paper contribute towards the discourse of decolonisation in higher education.*

**Keywords:** Africanisation, apartheid, colonialism, decolonisation, higher education, responsiveness, system.

## INTRODUCTION

This paper notes the historical foundations of higher education in South Africa that have been adopted from the Western and European models. South African universities being a project of a post-colonial state, struggle to identify themselves independently from the colonial architectural designs, especially their structural and curriculum designs of various restraints. Pondering on the curriculum responsiveness, Sayed (2017) agrees that African scholars were exposed to European education systems that perpetuated Western culture and colonised their minds and to accommodate a Eurocentric way of understanding the society they live in instead of an Afrocentric approach. Similarly, Nkondo (2016) is of the view that colonists started a Eurocentric education project for Africans that was different from their British and Western education project.

However, the 21<sup>st</sup> century African universities that have been rated as the best have enjoyed the privilege of excellence without reservation or remorse, only when they follow Western and European culture and assured to their scholars that Eurocentric education system is the best way to go. In this context, universities should be universal institutions that respond to the needs of the society and be able to adapt to change. African universities that strived for acknowledgment at the heart of the African transformation and development have failed to get the best ratings by their European counter-part since the ratings are assessed best on the Western European culture. Some of the ratings in Higher education in Africa are framed around earnings; earnings for the individual and earnings for their work and society which creates pressure on scholars as they are expected to respond to the societal needs. Thus, responsiveness has been commodified in higher education since there are earnings and grants attached to university core business. Although scholars in South Africa have already echoed their voices on the transformation of higher education, they have adopted a lame duck approach in proceeding with the Africanisation of higher education system.

Msila (2009) contends that in the 21<sup>st</sup> century, some African intellectuals were already anticipating an education system grounded in African philosophy and African values. Therefore, there is a case for universities to respond to the call to decolonise their core business. This theoretical paper will respond to the question of how the

university must respond to decolonisation by contextualising responsiveness based on teaching and learning, community engagement and research. This paper adopted a qualitative literature review that draws data from various studies on decolonisation published in accredited journals, books and policy documents. The following section will contextualise decolonisation.

## THE CONTEXT OF DECOLONISATION

Various scholars alluded on the decolonisation project with the intention to start a process that will influence African scholars to depart from the dominance of European ideas and move to a more reasonable understanding of their commitment to educate scholars about their origins, African culture and social beliefs for starters. Ndlovu-Gatsheni argues that intellectual and academic interventions must transcend the twentieth century mythology of decolonised African world. Nyoni (2019) is of the view that the practice of decolonisation must be a project that rejects the hegemony of the colonial masters in designing and planning of the curricula for African children and scholars. His notion of decolonisation is deep-rooted on violent obstruction of 'ways of knowing' and being among indigenous civilisations in Africa within the imposition of a new world order post Imperial order.

The conquest of Africa by colonial rule meant the demolition of indigenous, political, education and economic systems. Pondering on the imperative to decolonise education system in South Africa, Jansen (2016) notes the failure of the apartheid government to provide equal access to education in SA when learners were restricted to development through acquiring school knowledge which was distorted to ensure control over the intellect of the learners and teachers. The society suffered from the fruits of distorting and propaganda in many forms, hence this study seeks to canvass for the deconstruction of knowledge transmission in the institutions of higher learning.

The concerted decolonial efforts should be inclined to manage these backgrounds matrices of material social constructs that are of the view that European universities have always been presented as the best and are at the epicentre of development, leaving African universities to be at the periphery, and the subject is never ending. Decolonisation should close the existing gaps of inequality in the society and borders that are used to rate and describe the university types. There must be no group of people in the society that will suffer due to this new awakening. To some extent, globalisation and internationalisation have demonstrated that European and African universities can share knowledge and ideals on the nations across Africa through different strategies of collaboration and partnerships in research, teaching and in academic citizenship.

Ndlovu-Gatsheni's (2009) asserts that African research agenda and its unresponsive nature emanates from the fact that "Africa's intellectual agenda has largely been set by Western-European interests that are reflected in the former colonial relationships and geopolitical power. The more recently emerging partners on developing economies demonstrated that societal solutions can be addressed across regional and international borders like in the case of BRICS forum that include powerhouses like China, India and Brazil and are also contributing in the production of knowledge on Africa with South Africa as their partner. Scholars in the SADC region also demonstrated the practicality of trans-disciplinary forums that focus on Africanisation of higher education systems while universities are responding to regional and societal challenged that needed to be addressed.

Conversations around decolonisation are quite relevant at this current decade for the re-awakening of Africanisation of educational teaching and research agenda that indulge on African knowledge thought. Africanisation and decolonisation are sometimes used inter-changeable. Debates around Africanisation emerged in the late 1950s to the late 1970s when African nations like Ghana, Kenya, Tanzania, Zambia and Mozambique liberated themselves from colonialism (Mheta, Kehdinga, Govender, Hemson, Govender, Lungu and Manjeya, 2018). These countries were concerned about nation building universities that are expected to be the hubs of knowledge that can assist in responding to societal needs. During the nation-building era decolonisation' was not separated from 'Africanisation'. As noted by Msila, (2009), Frantz Fanon was extremely critical of "Africanisation" which he dismissed as chauvinism which had the potential to metamorphose into racism. However, this paper defines Africanisation as a mental and practical process of making Africa the centre of the educational project in higher education. African scholars are concerned about being left out of crafting their own intellectual agenda, aided by the fact that their state governments do little to support local research and researchers. Also of concern is that little is being done to engage seriously with the production of knowledge outside the university forums.



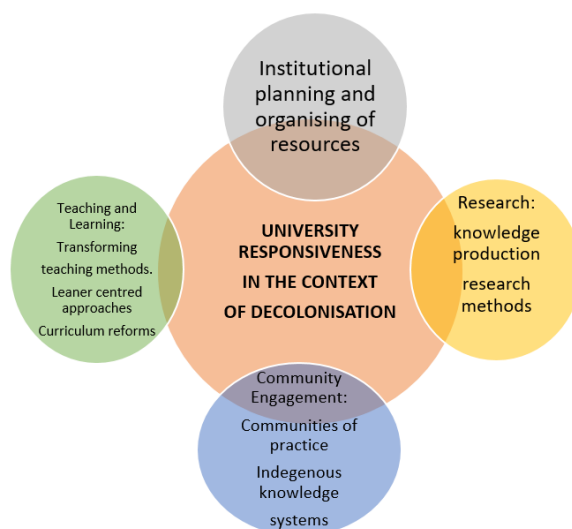
# UNIVERSITY RESPONSIVENESS

Based on the literature review, responsiveness of a university include alignment of its core business with decolonisation. Universities must be transformed in order to be decolonised. Therefore, university responsiveness must focus on teaching and learning, research and community engagement:

## 1. Responsiveness and Teaching and Learning

Decolonisation require teaching and learning to re-examine the leading hegemonies that had a negative influence on teaching and learning. Examining the process to decolonise the mind-set, Ngugi wa Thiong'o (1986) sought to start a process where decolonisation can change the paradigm of thinking among scholars in Africa. His notion of decolonising the mind-set emanates from the idea that current debates contest the links between decolonising the mind and educational institutional decolonisation. According to him, decolonisation should mean “the process of changing the paradigm of thinking, by unfreezing the mind from the colonised state to independent status. Oelofsen (2015) further translate the change of the mind to be centred on the personality, social actions (behaviour), education settings (teaching and learning), curriculum and research practices. Therefore, decolonisation must re-examine teaching and learning strategies, and the psychological capacity of those who teach in order to foster a new phase of a broad transformation and fundamental change concerning the identity of higher education institutions. This phase has started in the 1980 with a lame duck pace, to dismantle the apartheid apparatus that continued to support the colonial legacy, while in other versions the ‘curriculum’ appears to be understood mainly as what is taught, instead of requiring an Africanised and indigenisation knowledge systems. The whole project of decolonisation must reflect on the question of ‘how should universities in Africa frame their teaching and learning strategies. In examining decolonisation, Nkoene (2006) notes the gaps created by African scholars in crafting their African knowledge production. His assertion of African universities' role is that of a university that will bring immediate change to Africans by constructing an environment that they would relate to the African experience and respond to the societal needs which have emanated and continue to emanate from such experience.

**Figure 1:** The context of university responsiveness



**Source:** Owners work (2019).

The core of the strategic planning of teaching in an African university must be framed around its disciplinary problematisations, models, systems, structures, classifications, examples, illustrations, solutions and interpretations and misinterpretations based on the African realities and socio-cultural constructs. Frere (2004) assessed the relations

of the oppressors and the oppressed in an education system. In his analogy, he came with an understanding of the fact that relations of the scholars in the North (main core) and the scholars in the South (periphery) are skewed and not normal, hence later on the oppressed become the abusers. To him, this university (referring all universities or most for they all follow this model) began as a colonial project with the ambition to create universal scholars who stood for excellence regardless of context, and who would serve as the vanguard of the “development” agenda without reservation or remorse. Reservations can be isolated only when scholars can unchain themselves from the colonial mind-set, and universities to drive the agenda to acknowledge African value systems as dominating in teaching and learning.

University communities in South Africa are still racially divided and practicing inequalities of race and gender imbalances (CHE, 2018). Different racial groups have been made to socialise by considering their common traits and cultural background and thus made the university an involuntarily segregated environment. The recent student anti-colonial protests of the removal of colonial statues and movement for free education in South Africa shaped the debates to decolonize and change the curriculum in South African universities. These movement for change have been pressured by continuous contestations on discourse of Eurocentrism and institutional racism in universities. Disciplinary homes in South Africa copied their curriculum outcomes from Western theoretical traditions and neglected African knowledge from (South) Africa and elsewhere in the global south.

Universities must recognise the extent to which the classrooms and lecture-halls are presenting spaces for students and instructors to interrogate their contexts, material conditions, experiences, ideals and dreams in the learning effort, and by consequence to what extent are they able to use their background knowledge in responding to societal problems. Therefore, a learner centred approach can assist instructors to focus on the needs of the students when crafting their curricula. Academics have a great influence in determining the content of the curriculum, they must learn lessons from other African scholars to strategise their curriculum mapping and find new ways of including indigenous systems of governance (Sayed, Motala and Hoffman, 2017) Therefore, they must reposition the scholarship of teaching and learning to respond to these national demands. Currently subject areas and content are developed from the new agenda of government intentions and national goals to address issues such as governance, poverty, professionalization and training, modes of delivery, research, resource management and budgets, monitoring and evaluation of public programmes. Le Grange (2016) is of the view that a curriculum can be constructed by disciplinary boundaries, material resources and the university culture.

According to Nyoni (2019), decolonisation must move away from colonial tendencies of teaching, and incorporate colonial projects when designing decolonial curricula that will construct appropriate knowledge competences, skills, belief systems, skills and practices. Decolonisation debates must cascade to local forums and address issues of preparedness on the learners in advancing the decolonised curricula. The university community must prepare the transition on how decolonised learners will be accepted in the community and how they can impart knowledge with the intention of addressing societal challenges. African scholars must be re-orientated to use formal education to serve the African interests instead of serving dominant geopolitical powers. Decolonisation therefore would be reversal, democratic, and Afrocentric as a focus of African higher education that aims at re-inventing the new dawn that is reversing the ills of colonialism and apartheid legacy in the higher education with African thoughts and theories. In an attempt to create an African university, Nldovu- Gatsheni (2016) pronounces that academics must re-think and make universities to be at the centre of producing knowledge that embrace Africa-centred knowledge. Such kind of a reform is envisaged to secure Africa as a legitimate epistemic base for knowledge production and communicate with the world.

## **2. Responsiveness and Community Engagement**

The main focus of the role of university education in the future of communities is definite since institutions of higher learning (IHL) in nature transmit knowledge in theoretical form and in practice. Therefore, knowledge, communities, and universities are inseparable in their role to develop the national economy. Universities are compelled to engage with stakeholders, of which communities are major stakeholders of new knowledge and skills—which are also critical and central drivers of the economy (Kornelsen, 2018). As universities are charged with the responsibility to producing rich learning conditions that organise learners for their place in society, they must understand and use original knowledge and institutions that serve as hub of African knowledge systems. Kornelsen (2018) is of the view that

decolonisation of institutions is about embedding the Indigenous perspectives and learning into the learning agenda so that institutions don't continue to marginalize and harm Indigenous communities.

The quest for decolonisation calls for universities to respond to societal problems, by engaging communities to assist in providing access to original knowledge of high quality—and provide environment that bridges knowledge generation and the application of such knowledge in the society. Universities must also acknowledge the central diversity of communities in their preparation of the research agenda. This diversity can be further applied as constructs to investigate African solutions and as a source of innovation and a value for diversity as a resource. Nyati-Saleshando (2016) asserts that when diversity is viewed as a threat, its co-existence in the society can be challenged and the contenders can destruct the original cultures. This idea is not far-fetched from the experiences of South Africans whom their indigenous knowledge systems and traditional ways of leaving have been eroded by the apartheid system.

Decolonising community engagement must begin with unmasking the modern world system and the global order of understanding the role of a community as the broader context from which teaching, re-search and community engagement are cascading and are influenced. Barndt & Reinsborough (2010) assert that decolonisation can be understood as a process of acknowledging the history of colonialism; and strive towards undoing the effects of colonialism that can be observed from the affected communities habits, attitudes, and behaviours. This also requires the acknowledging and recognising of indigenous communities, and make them hubs of knowledge in which learners can learn and share knowledge. The present crisis of universities is the continued use of selected communities that do not resemble the African societies. Scholars in South Africa have to identify communities and partnerships that promote their interests without forcing students to adhere religiously to existing Western ways of knowing and understanding the world. Decolonisation must be addressed by focusing on the humanist and right-based approach of community engagement at various levels of knowledge production so as to recognise and use African origins existing in local communities.

### **3. Responsiveness and Research**

As part of the decolonisation discourse, there is not only a questioning of whose knowledge (western etc.) is dominant, but how the original knowledge can be embedded with the new knowledge. Decolonisation of research is not new, scholars such as Archie Mafeje (2000), Achille Mbembe (2015); Sabelo Ndlovu- Gatsheni, (2013); Moletsane (2015) and Chiumbu (2017) have argued on decolonisation with reference to various disciplinary constructs in South Africa. Research in the South African university, must question the present and the future societal issues and be able to carrying out an ontological project of reasserting what it means to be African, there are two tendencies that seem to follow. The first is to idealise pre-modern societies and rectify the idea of a past and static tradition. The need for decolonisation in higher education in South Africa proceeded the student's demands for a free and equal education in the era of globalisation and internationalisation.

Fatar (2018) asserts that knowledge production of colonial university or school paid no attention to indigenous knowledge's, African social constructs of the poor working class, or the literacies of urban blacks. Therefore, the call to decolonise research must focus on the production of knowledge that has been continuously being misunderstood since African cultural and belief systems have been eroded by colonial system and other forms of oppression. The nature of the arrangements of colonisers is perceived as having the intention of misrepresenting Africans to have acquired capital and political freedom to engage and compete equally with other groups at all levels. Therefore, the Research Agenda for decolonisation calls for diversity in the production of knowledge, which refers to the inclusion of complex learning methods that are specifically directed to the vulnerable and previously excluded groups in the society. Decolonisation sought to canvas for the negation of the hegemony of Western-centric knowledge that have previously isolated the indigenous knowledge systems to be part of the research agenda in Africa, so as to respond to identify unique ways of addressing African problems.

It is no doubt that the positive approach of the Frankfurt School, was unsuccessful in sprawling the research agenda of the previous decades for the emancipatory African struggles. According to Santos (2014) the scholarly research agenda of this decade has been mixed scientific genres of the bourgeois thinking that criticizes the same epistemological foundations that suppress the cognitive dimension of social injustice. Santos (2014) posits that the Western understanding and transformation of the world sees itself as a vanguard theory that excels in knowing about, explaining, and guiding rather than knowing with, understanding and sharing knowledge alongside with people.

Chuimbu (2017) asserts that knowledge production has been dominated by the Western scholars that are ignorant of African origins. The very same understanding of their research agenda was based on the interests of the few Western philosophers and scientists. Therefore, the proliferation of the colonial research agenda has been bounded by the understanding of the social world that remains largely colonised with knowledge that remains hegemonic. This paper proposes that decolonised research agenda must focus on a holistic framework that deconstruct the hegemony of Western thoughts and be able to address the well-being of African societies. Research agenda will thus question the very same scientific structure and fabric of our disciplines that is mired in a history of decoloniality.

## CONCLUSION

This paper demonstrated that university responsiveness must filter to the core business of the university that includes teaching and learning, community engagement and research. It should be noted that decolonisation is not one-size fits all, since its practicality would vary from one discipline to another. The discourse of decolonisation must permeate all these tendencies that suppressed cultural belief systems of African scholars in all levels of knowledge production. Scholars argued a strong case that the Western-centric critical tradition and apartheid policies failed to address all the emancipatory struggles of African people. Teaching and learning must be embedded with African traditional systems and cultural ways of thinking that would have unique features to define them and their agenda based on their realities in the world. Research must address societal problems that affect them. Decolonising research (DR) methods must be purposeful and deliberate approach that will transforming the institution of research, and erode the deep underlying structures that are gate-keeping those scholars that would want to transform the organizing, conducting, and disseminating research knowledge in African societies.

Decolonisation should be understood as a process that seek to enlighten the academy of learning without compromising the quality and relevancy of education. Since decolonisation is not one size fits all, university stakeholders must be engaged so as to reach the desired infusion of decolonisation themes where they necessary fit without compromising the standards of various disciplinary outcomes. This study recommends that universities must align the decolonisation themes with their strategic plans so that these themes can be cascaded to faculties. Faculty staff must be workshopped to prepare them to advance the decolonisation discourse in their respective fields of study. Decolonisation can also contribute to international community by recognising that Africa is self-confident in its origins, shared values, identity, heritage and culture as a strong, as a united front that can be influential partner to global community making its contribution to peace, human progress, peaceful co-existence and welfare.

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# EXPLORING COMMUNITY ENGAGEMENT IN THE CONTEXT OF PUBLIC ADMINISTRATION: THE CASE OF A COMPREHENSIVE UNIVERSITY

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## ABSTRACT

*This paper explores strategies of embedding community engagement in the context of public management in a comprehensive university. Community engagement is receiving attention from various universities worldwide as a process of working collaboratively with various partners affiliated within a geographic proximity. This paper argues that universities are compelled to facilitate a wide legitimacy of their academic programmes by forming relations with government, accreditation institutions, industry and communities. The purpose of community engagement is to narrow the gap between theory and practice by using various strategies such as work integrated learning (WIL) in the discipline of Public Administration and Management (PAM). This study employed a qualitative document analysis approach to collect and analyse data. Findings from this study will contribute towards the development of a Community Engagement Model (CEM) in the field of Public Administration and Management (PAM).*

**Keywords:** work-integrated learning, public management, curriculum, comprehensive university, work-readiness.

## INTRODUCTION AND BACKGROUND

This study explores strategies that can be adopted to benchmark community engagement in the field of Public Administration and Management (PAM). Community engagement (CE) is regarded as a core business by institutions of higher learning in South Africa. The necessity to integrate CE is receiving much attention in various disciplines such as Public Administration in the world of higher education academy. The main goal of adopting community engagement strategies is to provide an opportunity for the university to engage with the industry, the civic community, the students and other stakeholders, in an interactive process that will expose students to the world of work. Institutions of Higher Learning (IHL) face challenges in sustaining their relations and contacts with their stakeholders and surrounding communities, and in developing intellectual foundations that advance knowledge production. It is a requirement for Higher Education (HE) to comply with the Higher Education Quality Committee (HEQC) in adopting CE as part of the institutional curricula and including it in the critical cross-field outcomes of university curricula.

Public Administration is a discipline that focuses on the theory that is thought in higher education and its application and practice in various public institutions and departments. Therefore, community engagement can be used to close the gap between the theory and practice in the public affairs agencies and departments. The integration of theory and practice in public administration studies has been an issue since its very beginning in the Western public administration education (Zhang, Sun & Jenningsco, 2013). Most of the contents of PAM theory have been adopted from the Western European theories, and have excluded African belief systems, culture and governance systems. University administrators, academics and practitioners are all responsible for the benchmarking and organising of platforms and activities that can expose learners to various activities that can teach them the practical side of learning various methods that can be entrenched in their academic programmes.

The practice of community engagement takes place within the university and at the work-place which is outside the university environment. Academics can also use their academic freedom and create themes that reflect the background of their students and their culture and belief systems. The various forums where academic and practitioners interface to share some ideas on community engagements must include local and African agencies that have interest in working with students in addressing societal problems. University departments can also adopt strategies on how their academic departments with faculty boards can integrate community engagement and work-integrated learning (WIL) into academic programmes. Academic programmes in PAM must be aligned with WIL and service learning to prepare students for careers in the public sector and non-governmental sector. Universities also offer academic programmes in recognition of a variety of issues, knowledge, skills and applications necessary for future public managers.

As part of the curriculum in Public Management programmes, students are required to join public sector organisations, non-governmental organisations and community organisations to conduct service learning before they can graduate. The purpose of embedding service learning into academic programmes is to afford students an opportunity to integrate the theory they learn in the classroom with practice, as well as gaining practical experience in the real world of work. It is also to encourage students to reflect on their experiences and develop and refine their own conceptual understanding. WIL is being positioned as one of the key opportunities for improving the work-readiness of graduates. This study is theoretical and draws data from policy documents on curriculum and work integrated learning and community engagements, books and articles from accredited journals. This paper explores how PAM can adopt WIL as part of the core business and as part of their academic professions. This study will accomplish its mission by focusing on the conceptualising of CE, the international and national experiences of practising community engagement, analysing the factors and determinants for benchmarking CE in the context of public administration, the way forward, and finally the conclusion and recommendations.

## **THE PROBLEM STATEMENT**

Higher Education is mandated by government policy directives to integrate community engagement into diverse curricula to expose learners to the work environment through work-integrated learning and service learning among other kinds of experiential learning (NPHE, 2001). Learners participating rate is a challenges since it's the responsibility of institutions to seek placement in various organisations to be exposed to work place training through in-service learning. However, students' participation in CE is also affected by different intrinsic (institutional inherent) and extrinsic (external) factors in higher education. Taciana et.al. (2017) argue that educational systems are unable to encourage learners to participate due to their outdated approaches that are not technological advanced enough to cope with a world permeated with digital technologies. Dwesini (2016) is of the view that learners are not given enough time to conduct service learning in the industry and in government departments, where they are placed by their universities. When WIL is not blended with the curriculum, then learners will not be adequately exposed to the workplace and will not be given a reasonable amount of experience in the world of work. Also, due to the high enrolment numbers in some universities, learners are not all placed in time in government departments. Some of them end up extending their period of studies in order to complete their undergraduate programmes. This paper argues that there is gap between the policy and practice of work-integrated learning due to inherently systematic challenges across different institutions and departments. University departments have been compelled to benchmark community engagement strategies that do not reflect the background of all students, especially their African background that recognise their African culture and belief systems, experience inherent systematic challenges since the discipline of PAM has inherently recognised Western and European theories only. Some challenges later complicate the implementation of WIL in different ways due to the pressure of higher education transformation and institutional change (CHE, 2010: 5). Thus, this paper explores the integration of WIL within the curriculum of public administration and management, and the challenges experienced by institutions while exposing learners to various WIL strategies.

## **CONCEPTUALISING COMMUNITY ENGAGEMENT**

The philosophy of community engagement can be contextualised in various aspects such as university community information, community consultation and community participation. However, the philosophy of CE serves to discover the contribution of participants/stakeholders and their strategies to engage communities, and explicates processes as

rules or policies that guide the process and activities for engagement. Hall (2010) holds the view that there is lack of progress in the implementation of community engagement in higher education institutions in South Africa and he attributes this shortcoming to a lack of clarity on the concept of community engagement.

Auf der Heyde (2005) asserts that a greater clarity and consensus on the meaning of the notion of community engagement is imperative for benchmarking community engagement in higher education. The literature defines CE as a combination of programmes and activities offered by universities to enhance the practice of what they teach by forming collaborations and partnerships with specialists, communities, groups, and organisations that are external to the university community (Nduna, 2010). Some of the partners and collaborators are located at local, regional and international levels, and their objectives are intended to offer volunteer participation to fulfil their development initiatives, to advance research, place students for in-serve training, and empower communities, to improve university capacity and competencies and to offer service learning and cooperative education.

In the context of this study, community engagement is conceptualised as: “the partnership of university knowledge and resources with those of the external community to enrich scholarship, research, curricular content and process and benefit students while addressing community needs, problems, issues and challenges” (Pretorius, 2003). The concept of community in this paper refers to everybody who is external to the institution, that is, all stakeholders which include the industry, the labour market, private organisations, government departments, community organisations, and NGOs. Engagement as a process refers to the act of a university relating with other stakeholders through partnership using university knowledge and resources with the intention to enhance creativity, research, and learning to enrich scholarship and advance values shared by all stakeholders and citizens. Clearly stated, engagement refers to a form of partnership in which there is a mutual understanding of the objectives of a project.

## **COMMUNITY ENGAGEMENT IN HIGHER EDUCATION**

The practice of community engagement is guided by various policies in Higher Education (HE), particularly those on diverse strategies and mechanisms that allow CE to be integrated with other core businesses of the university such as teaching and learning and research. In the post-apartheid era, universities have transformed in a manner that recognises the importance of stakeholders’ participation in university decision making. In addition, policies such as the White Paper in Higher Education (1997) laid a foundation for the recognition of community engagement as an integral part of the university’s core business. The Government National Plan (2001) also emphasises the goal of community service, calling on all universities and universities of technology to develop the responsibility of engaging communities and to form international linkages that will assist universities in benchmarking their academic programmes well.

Furthermore, the Council on Higher Education Quality Committee (CHEQC), has recognised service learning as an important criterion for the accreditation of academic programmes. In addition, the Higher Education Act (1997) supports the idea that university governance structures should also respond to the needs of the communities within their regions. The merits of WIL can be observed from the competencies and the attributes acquired by graduates when they complete their academic qualifications. The advancement towards a blended CE offers opportunities for learners to acquire various skills. The White Paper for Post School Education and Training (2014) emphasises the importance of community engagement in higher education. In the same sentiment, the South African Council of Higher Education supports the inclusion of CE in professional qualifications despite the lack of clear policies dedicated specifically to community engagement in higher education (CHE, 2010).

University staff are now more responsive to the needs of their regions and local communities, are in the process of transmitting knowledge and advancing collaborative projects that develop communities. However, universities are compelled to provide enabling mechanisms and support for staff and students participating in CE. Olowu (2012) is of the view that HE institutions are responding to community needs by linking their strategic goals of operation with strategic stakeholders outside of their academic environments. To strengthen CE strategies, academic staff involved in CE projects must, in the process of engagement, apply various skills aligned with community interests, in identifying suitable projects to address community problems in the process of engagement. Henderson and Trendle (2017) agree with the notion that work-based learning can also add value to improving shared collaborative projects run by universities and communities.



Strategies for implementing and practising community engagement should be assessed across all universities, to enhance a framework of articulation of structures and processes that allow the blending of necessary WIL outcomes with the industry practice. Universities must form international partnerships and linkages with other universities for peer support and peer review. Significant factors for successful collaboration between the university and the industry is trust, understanding of interests, and goodwill to assure mutual benefits and the attainment of quality learning outcomes by the university.

## **COMMUNITY ENGAGEMENT IN THE CONTEXT OF PMA**

Public Administration and Management (PAM) studies have followed suit in adopting community engagement strategies as required by higher education policy reforms. The following strategies are practiced when adopting CE in the field of PAM:

### **1. Academic citizenship:**

Academics in the field of PAM possess multi-layered roles when discharging academic roles and community engagement. While they are expected to fulfil their performance agreements on teaching and learning, community engagement and research, they must also serve in improving the scholarship of public administration through academic citizenship. They are expected to attend to academic communities, where they can use their specialised knowledge and assess the work of their peers through academic citizenship. The working description of “academic citizenship” relates to the act of responsible academic citizenship that demands academics to be engaged in community needs, collegiality, civil participation, collaborative participation and engage with other universities/ colleges/ universities of technology in their academic activities including peer review mechanisms.

The determinants of academic citizenship also include awareness of the institution’s strategic goals for a vigorous contribution to its implementation; and a willingness to offer support in the integration of crucial needs and debates on elements of “scholarship application; of community engagement, which is concerned about the understanding that knowledge is not transmitted in a linear fashion” (Lazarus, Erasmus, Hendricks, Nduna and Slamati, 2008). Other academic interests are determined by their research niche areas and their interests on specialisation in courses they teach. Public Administration is regarded as an Art (practice) and a Science (academic) (Thornhill, 2012). Therefore, Public Administrators have no limitations in creating an analytical / scientific meaning through their practice and community service.

### **2. Research and advisory services:**

Academics are mandated to conduct research to improve their decision-making skills and advance their contribution in public policy- making to benefit the broader society. According to De Wet (2014), Public Administration as a field shapes the main trust between the state and development initiatives. De Wet (2014) further asserts that the state must further prioritise on how it can fulfil its developmental mandate while recognising the needs of the society. Academics in PAM can also conduct peer reviews as part of community engagement and academic citizenship. These peer reviews enhance relations between academics and their institutions. They also offer honorary services for other institutions through the examination and moderation of assessments, and the examination of research reports. Matsiliza (2017) further notes that the nature of the discipline of PAM is embodied in the practice concerning the diverse roles and functions of the state/ government that aim to promote public good.

### **3. Partnerships and collaborations:**

However, the on-going discourse on government strategies towards collaborative management has implied more involvement of various stakeholders in responding to societal needs, of which academics in the field of PAM are noted as important stakeholders and advisors to government departments. These collaborations further imply that communities are centre stage in the existing relations and engagements, formed by PAM academics and students, between the academics in public administration and other stakeholders. However, CE can also be associated with public policy demands in South Africa, which are associated with collaborative management in the post New Public Management era. Public agencies and government departments seek collaborations and partnerships to address public service delivery gaps and backlogs. Academics with their expertise advise the government and other agencies on

various issues to address societal problems such as service delivery. Government's orientation towards a collaborative approach implies that academics in the discipline of PAM need to formalise community engagement as a criterion in designing their academic programmes.

Based on the literature review, it is evident that South African universities have long been involved in community engagement. The problem is how community engagement has been conceptualised and benchmarked in various fields. Hart and Northmore (2010) assert that approaches to CE are not developed solely by the higher education sector. They also need the support of potential stakeholders, local communities, as well as the student community especially when it comes to social development efforts. The social dimension to understanding community engagement is based on a variety of efforts aimed to address social responsibility in relation to issues affecting communities in diverse places. In addition, academics are also expected to use community engagement through training and capacity building in order to advance their third-stream income of students. It is imperative that PAM academics avoid academic drift by losing their sense of civic purpose and become fully fledged commercial enterprises that prioritise third stream incomes more than their call. Training programmes in PAM are developed and designed as innovation programmes that can assist students and community members in developing their civic skills. Faculties must adopt strategies to advance academic citizenship and encourage scholarship that meets both professional and community needs. This must be aligned with research agendas and outreach efforts aimed at addressing important social, economic, political issues in the broader society.

#### **4. Service learning:**

According to Kruss (2010) service learning in South Africa is meant to expose learner to civic awareness and improve quality of life of the communities they serve. The current focus on community engagement (CE) in the higher education sector emphasizes the development of sustainable partnerships and collaborations with external organisations. It is believed that enhancing partnerships between academic institutions and the industry in order to inform the curriculum and enhance employability outcomes for students ultimately improves economic productivity and sustainability (ACEN, 2015). Community engagement takes different forms, for example, knowledge transfer, the development of communities of interest and high impact community based programmes. It is believed that these community engagement activities expand the learning and discovery functions of the academic institution, while also enhancing community capacity (Holland, 2001). Harding (2006) suggests that measuring community engagement should incorporate an assessment of the percentage of students undertaking a domestic or international workplace learning experience. This again implies that WIL is regarded as a form of community engagement.

#### **5. Work-integrated Learning:**

Employers in both the private and public sector in South Africa as well as abroad place increased focus on the need for work-ready graduates from higher education institutions, in order to meet the demands of the changing and global economy. Concern has also been raised about unemployable graduates. The importance of the role of the higher education sector in equipping graduates with capabilities that meet the expectations of employers, while at the same time facilitating a smooth and effective transition for graduates into the workforce, has been highlighted. Work-Integrated Learning (WIL) is regarded as the best strategy to address these shortcomings. Ferns, Russell and Kay (2016) and Ferns, Campbell & Zegwaard (2014) contend that while there are various ways of implementing WIL, authentic engagement with industry and community partners is fundamental to quality outcomes.

Work-Integrated Learning (WIL), just like community engagement, is defined in different ways. Patrick, Peach & Pocknee, (2009) refer to WIL as an umbrella term used for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum, and through specifically designed co-curricular programs where students' graduate capabilities are enhanced by co-curricular work experience and community engagement opportunities. According to CHE (2010) the term WIL describes an approach to career-focused education that includes classroom-based and workplace-based kinds of learning that are appropriate for the professional qualification. Engel-Hills, Garraway, Jacobs, Volbrecht and Winberg (2005) describe WIL as an approach to career-focused education that includes theoretical forms of learning that are appropriate for technical/professional qualifications, problem-based learning (PBL), project-based learning (PJBL) and workplace-learning (WPL).

A key aspect of WIL is the notion that it entails the integration of knowledge and skills gained in institutions of Higher Education (IHEs) and in the workplace. What distinguishes WIL from other forms of workplace learning is that it emphasizes the integrative aspect of learning. WIL aligns academic and workplace practices for the mutual benefit of students and workplaces. It is primarily intended to enhance student learning. Davies and Shirley (2007) assert that WIL provides a context for skills development and an opportunity for students to prepare for the transition from university to professional practice. WIL is in effect a partnership between the university, student and the employer (host organisation). Integral to successful WIL approaches are firstly engagements with external organisations. Therefore, WIL programmes clearly fall within community engagement. Partnerships with external organisations are complex and occur in many forms. WIL is high on the national agenda and gaining much attention as a key strategy for higher education institutions to address the demands of stakeholders such as the industry, regional communities, students, government and NGOs.

## **THE CASE OF A COMPREHENSIVE UNIVERSITY**

Embedding community engagement in an academic institution requires commitment from all the parties involved. Academics must plan and design a course structure that is linked to regional and local community interests within the location of the institution involved. University staff and faculty board members must align their WIL strategies with the university strategic plans, and with those who work in centres dedicated to offering community services, making arrangements for interdisciplinary operations and their budgetary allocations, mechanisms for consultation, monitoring and evaluation, feedback and conflict resolution as well as accessibility to the community (AUCEA, 2006). The comprehensive university under study is strongly committed to community engagement. This is reflected in the university's mission and vision and in its institutional strategic plan (ISP) for 2015 -2019 and the university's Annual Performance Plan. For example, Walter Sisulu University (WSU) has positioned itself as a developmental university with the following mission and vision:

Walter Sisulu University is an academic institution which not only promotes basic and applied research as well as excellence in undergraduate and postgraduate studies, but also actively contributes to national development through established programmes with strong focus on mutually beneficial community engagements.

The WSU ISP states that WSU is striving towards a world class community engaged comprehensive university. In addition, Goal 3 of the ISP states that WSU is striving to promote community engagement that enriches scholarship while addressing community needs (WSU Annual Report for 2017). Moreover, 50% of the institution's academic programmes will incorporate a credit-bearing component of community engagement by the end of 2019. It also plans to ensure that 100% of its students are timeously placed for service-learning and/or work-integrated learning. WSU is strongly committed to working in partnerships with employers of its graduates to ensure that the academic programmes offered by the university and the quality of graduates produced meet the needs of the industry and that of the communities.

The case of a university is a comprehensive university in South Africa with some academic programmes that are designed to incorporate a compulsory component of WIL, which is meant to give students the opportunity to integrate the theory they learn in the classroom with practice. The National Diploma in Public Administration and Management (PAM) (NQF Level 6) is one such programme. The PAM is aimed at practitioners working in the public sector or moving into the public sector. It is a qualification for a career pathway towards an accomplished PAM specialist. The purpose of the PAM qualification is to provide a structured programme for public officials that work with senior and executive management officials, so as to provide support to strategic leadership and management needed to transform all spheres of government. According to the South African Qualifications Authority (SAQA), learners who achieve this qualification will:

1. Develop and manage knowledge management and knowledge management systems for the public sector
2. Manage the implementation of strategies, policies and plans in a public sector environment
3. Develop service delivery charters, protocols and agreements to support service delivery objectives and implementation with public sector environment
4. Promote and uphold strategic leadership within public sector environment
5. Create a culture of a learning organization within the public sector (ref.)

As the PAM qualification has a compulsory component of WIL, students registered for this qualification cannot graduate unless they complete the WIL module, which takes about six weeks. This requires PAM students to spend some time in the workplace doing work relevant to their curriculum. In this case, students are placed in government departments, municipalities, community organisations and NGOs.

## **WORK-INTEGRATED LEARNING IN PUBLIC MANAGEMENT**

WSU has a WIL office which is a component of the Community Engagement and Internationalization Unit. The WIL office at WSU promotes and extends the academic learning process into the workplace by establishing Work-Integrated Learning partnerships with commerce, industry and other employer organisations aimed at providing experiential work opportunities for students. The adopted WIL model is both centralized and decentralized. This involves a centralized management to which the decentralized, academically-based staff report. A WIL coordinator based at the Public Management Department is responsible for the placement of PAM students and for visiting them during their placements. The budget for WIL visits is controlled by the WIL office.

Like all students that have to undergo WIL, the PAM students must first go through a preparatory programme called the Work-Preparedness Programme (WPP) or orientation before starting the WIL programme. The WPP at WSU has been developed to explicitly prepare students for WIL and to enable them to articulate the learning from that placement. The main focus of WPP is to assist PAM students to:

- Know the importance of doing WIL
- Understand the workplace expectations on them and what in turn they can expect from the workplace
- Understand the importance of generic attributes for the workplace; and
- Gain a greater understanding of their professional responsibilities while in the workplace

Each PAM student is presented with a WIL handbook at the end of the WIL preparatory programme, which contains all the information presented in the workshop. In addition each PAM learner is given a logbook which is a document where the student will record everything done at the workplace during the WIL program. The logbook also states clearly the learning outcomes for the PAM WIL which are meant to guide the employer or supervisor into which areas must the student be exposed. This document also states explicitly what the responsibilities are for each party to the WIL partnership. The logbook must be signed by the workplace supervisor. The supervisor must also conduct performance appraisal with the WIL student and give feedback to the student.

Academic institutions need to be aware that not all WIL experiences are positive. This calls for monitoring and evaluation of the programme. Academic institutions should not just dump the learners in the workplace. All learners doing WIL should be visited by an academic institution representative. This serves as an opportunity for the institution to get feedback from both the students and the workplace supervisor. The visits are also an opportunity to strengthen relations between the academic department/institution and the workplace.

### **Planning for Student Placement**

Throughout the WIL placement, students are required to complete a logbook by recording all activities they were involved in. In this way, students' reflective practices are being developed. The students must also be given an opportunity for debriefing and reflection when they return to the academic institution after the WIL experience. It is well-documented that reflection is a critical part of WIL curricula and enhanced professional practice. Coreia & Blecher (2008) contend that reflection assists students in making stronger connections between theory and practice. Weisz & Smith (2005) assert that reflection on experiences should be central to any WIL programme as this facilitates deep learning for students and equips them for the future.

The key purpose of WIL is to provide PAM graduates with a comprehensive skill set, desired by potential employers, enhancing their chances of being employable at graduation. South Africa has a huge shortage of skilled employees and the public sector is no exception. Houltzhausen (2008) suggests that all relevant stakeholders, including government and the tertiary sector, must align their mission, education and training programmes so that a quality programme can be achieved; one that will be a true reflection of the workplace.

## **Key Stakeholders in the Implementation of WSU WIL Strategy**

There are various structures at WSU that contribute towards the success of the implementation of the WIL strategy:

### **1. Top Management**

Top management at WSU promotes the infusion of community engagement into its curricula using WIL and service-learning as ways to link theory and practice. In the organogram of WSU, there is a directorate for Community Engagement and Internationalization which houses an office for work-integrated learning and an office for service learning. In addition WSU's commitment in community engagement and WIL is reflected in the way top management supports the implementation of WIL by providing a budget for the implementation of this teaching and learning strategy. A budget is set aside for academics to visit students while in the industry. Presently WIL students are visited once because of budgetary constraints.

### **2. WIL Coordinators**

Each academic programme with a WIL component has a WIL coordinator who is responsible for WIL in that particular programme. There is also a senior WIL coordinator based at the WIL office who works hand-in-hand with all academic departments that offer WIL programmes.

### **3. Business Partners From the Industry**

The university has very strong relations with employers both in the public sector and in the private sector. WSU has signed quite a number of memoranda of agreement/understanding with employers whereby employers commit to placing WSU students for WIL. The Community Engagement & Internationalization Unit at WSU holds an annual business breakfast, where employers from the public sector, private sector, community organisations, non-government organisations (NGOs), and professional bodies are invited to come to the campus. The purpose of this function is to recognize employers who host WSU students for WIL and employ them. It is also to encourage those employers who do not participate in WIL to join in. This is another strategy used by WSU to strengthen engagement with its surrounding communities.

### **4. Advisory Boards**

WSU is an engaged university, offering a comprehensive range of programmes that promote a two-way communication on academic matters between the university, external stakeholders and the communities it serves. The advisory committee serves as one of the vehicles for achieving this objective. There is an advisory board for each institutional programme or group of programmes offered by the university including the PAM programme. The advisory committee meets at least once a year.

## **CONCLUSION AND RECOMMENDATIONS**

The integration of WIL in public administration has emerged as a strong support for the merging of theory with practice in higher education. This study notes that community engagement can be advanced with diverse purposes ranging from partnerships with communities, academic citizenship, peer support and review, responsiveness of the university, to workplace learning, collaborations and advisory role. Using the case of WSU, it has emerged that the goal of community engagement can be linked to university strategic goals and be developed through mutually beneficial partnerships with various stakeholders/communities. Based on the practice of the world of work, universities can learn from established partnerships with employers in the public sector, municipalities, private sector, civic-based organization (CBOs) and non-governmental organisations (NGOs) etc.

This paper therefore recommends that universities assess the changing outcomes in the discipline of PAM and allow current outcomes to inform key competency areas that can integrate WIL strategies into their curricula. A continuous assessment of WIL must also be linked to the scholarship of teaching and learning, to allow new initiatives to emerge during peer reviews. There is a need for students to be provided with more time for their placement in different work stations to allow them to learn more about the work environment.

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# PERCEIVED MANAGERIAL SKILLS AND COMPETENCIES NEEDED IN THE REAL WORLD: A COMPARATIVE ANALYSIS

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## ABSTRACT

*This paper analyzes the differences in managerial skills and competencies of nearly 300 MBA students from 6 universities in Saudi Arabia and Malaysia. In the questionnaire, the respondents are asked to indicate the levels of the managerial skills and competencies which they have gained from studying the MBA program in their respective universities. The findings indicate that the managerial skills and competencies of the Malaysian MBA students is significantly higher than the Saudi MBA students. The levels of interpersonal competency do not, however, differ significantly. There are significant relationships between the background variables and work and interpersonal competencies.*

**Keywords:** Work Skills, Competencies, Graduate Students, Global managers.

## INTRODUCTION

Currently, graduates from Master of Business Administration (MBA) program in Asia need the ability to adapt to the dramatic changes in the new global business context. Essentially, they need to be equipped with the management competencies required in order to succeed as future business managers. However, there has been a widespread concern about the quality of higher education, particularly MBA programs.

In Saudi Arabia, there is a widening gap between the existing management competencies of managers and the competencies required by the business sector in order to become more competitive. Most Saudi Arabia university graduates are insufficiently competent in management approaches. One of the reasons to this is a weak Saudi higher educational system. The likelihood is that Saudi MBA students should possess higher management competencies than their Malaysian peers. In many Asian countries, especially in Saudi Arabia, the MBA degree programs in most Universities in the Kingdom are still lagging behind in terms of ranking compared to Malaysia. There were 6 six business schools in Malaysia were on the list compared to none from Saudi Arabia (<https://find-mba.com/most-popular/asia>).

**Ranked 6:** Faculty of Business and Accountancy, University Malaya;

**Ranked 23:** Strathclyde Business School, Malaysian Campus;

**Ranked 26:** Azman Hashim International Graduate Business School, University of Technology Malaysia;

**Ranked 33:** Putra Business School, University Putra Malaysia;

**Ranked 45:** Graduate Business School, University Kebangsaan Malaysia;

**Ranked 47:** Othman Yeop Abdullah Graduate Business School, University Utara Malaysia.

With this perspective, this paper investigates how MBA students in Saudi Arabia and Malaysia differ in respect to the management competencies gained from the MBA program.



## DEFINING MANAGEMENT COMPETENCIES

Two factors of management competencies, i.e. work management competency and interpersonal management competency, will be explored in this paper. The concept of the management competencies originates from Dale and Iles (1992). These competencies are considered behavioral, and specify the skills “required” of a person in a specific task. Competencies are related to the performance required of MBA graduates hired by businesses. A key to successful management competencies is measurability. According to Boyatzis (2017), the ability of a person that meets a job demand is both behavioral and measurable. For this reason, this paper will focus on management competencies which can be measured. It will assess the differences in management competencies of graduate students gained from the MBA in Saudi Arabia and Malaysia and analyze the implications for effective MBA programs in Asia. Based on the behavioral concept of managerial competencies, relevant literature has been reviewed. Two sets of required management competencies have been identified from the research on various competences. Ultimately, 11 management competencies are categorized by two factors. These are work and interpersonal competencies. A brief definition of each of the 11 management competencies is elaborated in **Table I**.

**Table 1: Management Competencies.**

MANAGEMENT COMPETENCIES FACTORS	MANAGEMENT COMPETENCIES (BEHAVIORAL PROCESS)
<b>Work Competencies</b>	1. Ability to implement work strategically: ability to implement the thinking and experiences of self and others to analyze and set strategic direction to achieve organizational goals
	2. Ability to plan and organize: ability to plan, schedule, coordinate works of self and others, and organize materials, people, and activities to accomplish targeted goals efficiently and effectively
	3. Ability to make decision: ability to make decisions based on available data and/or imperfect information
	4. Ability to solve problems: ability to take responsibility in addressing problems and seeing solutions through to completion
	5. Ability to analyze problems: ability to identify the points of the occurrences and problems, and to analyze and categorize the perceived information in systematic details, e.g. cause-and-effect, strengths and weaknesses, opportunity and threats and suggestions within external and internal contexts
	6. Ability to initiate new ideas: ability to initiate and implement new ideas to improve and develop the efficiency of the work process at all levels, i.e. at individual, business unit, and organizational levels
<b>Interpersonal Competencies</b>	7. Ability to lead team members: ability to motivate and simulate team members to accomplish and targeted goals and to support team members to work efficiently and to be responsive of their words
	8/9: Effective oral/ written communication skills: ability to provide oral and written communication effectively and efficiently and to ensure that

	information needed to manage situation and make sound decision are comprehensive, clear, and available to workers/ customers
	10. Ability to build interpersonal relationship with others: ability to build and maintain working relationships with a network of work colleagues
	11. Ability to adapt to new situations: ability to adapt personal and professional styles to meet the needs of specific situation, management, and changing work environments

## RESEARCH HYPOTHESES

This line of inquiry was guided by the following hypotheses:

H1. Saudi Arabia MBA students will score significantly higher than Malaysia MBA students for work management competencies.

H2. Saudi MBA students will score significantly higher than Malaysia MBA students for interpersonal management competencies.

## METHODOLOGY

### Questionnaire

A survey was conducted to collect data on the differences in management competencies gained through MBA programs in Saudi and Malaysia. The data of both the two countries MBA students were collected in person to avoid a low-response rate.

(1) with the permission of their instructor, the MBA students were asked to complete the questionnaires in the classroom before class; and

(2) the questionnaires were given directly to MBA students on campus to complete voluntarily.

The questionnaire was refined from personal interviews with domain experts, including academic researchers and human resources practitioners in both Malaysia and Saudi Arabia. It contained three sections:

**Part A:** Competency levels;

**Part B:** Cultural values; and

**Part C:** Personal background.

### Sampling

According to the Ministry of Education of Higher Education the population of students enrolled in the MBA programs in 62 business schools in Malaysia (public and private universities) was approximately 10,000 in 2018. For this paper, 150 responses were collected from the MBA students in the two Business Schools in Malaysia (University Malaya = top 6th in Asia; and Strathclyde University- Malaysia Campus - top 23 in Asia). Data from 150 MBA respondents were collected from two universities in Malaysia (King Fahd University = ranked 1st in Saudi Arabia; and Prince Mohammad University = ranked 5th in Saudi Arabia (<https://find-mba.com/schools/africa/saudi-arabia>)).

The sampling of MBA students from Malaysia and Saudi Arabia is purposive. This is appropriate for this research because there are certain relevant characteristics of the MBA participants which describe the representative dimensions of the population. To be included in the survey, an MBA student must have at least one year of work experience and be enrolled in their last year of the MBA program. These specific characteristics are necessary because, from the combination of work experience and study, the MBA candidates should have achieved the management competencies as required by their current or future job responsibilities.

Out of 445 respondents from the Saudi universities, 43 percent are males and 57 percent are females. For the 149 respondents from Malaysia, 54 percent are males and 46 percent are females. The majority of the Saudi respondents are in the age group of 26-30 years old, while the age of the Malaysia majority is between 31 and 35 years old. Most Saudi and Malaysia respondents study in part-time MBA programs because they still maintain full-time jobs. In terms of work experience, the highest percentage (46.8 percent) of Saudi respondents have work experience ranging from one to five years, whereas the majority (34.0 percent) of Malaysia respondents has worked between 11 and 15 years. Most Saudi MBAs, around 46 percent, are staff of corporations in manufacturing, service, and trade/retail industries, while approximately 56 percent of Malaysia MBAs maintain positions in the middle management level and are employed mainly in manufacturing, service and finance industries.

## Data Analysis

Nearly, all of the 11 management competencies of Malaysian MBA students are rated higher than those of the Saudi MBA students. Saudi MBA students were higher only in the “ability to build interpersonal relationship with others” and the “ability to adapt to new situations” than their peers in Malaysia. In addition to these two abilities, the other top three management competencies which Saudi MBAs rated the highest are “ability to solve problems,” “ability to make decisions,” and “effective oral communication skill.” The top five management competencies, which Malaysian MBAs rated the highest are the “ability to solve problems,” “ability to build interpersonal relationship with others,” “ability to plan and organize,” “ability to analyze problems,” and “ability to make decisions.” Both Malaysian and Saudi MBA students have the lowest rating for the “ability to implement work strategically.” This is the weakest management competency of MBAs in both Saudi and Malaysia.

Factor analysis was used to reduce the 11 management competencies to a smaller number of factors. The result from Bartlett’s sphericity test which showed that the p-value was less than 0.05 in the management competency scale suggested that factor analysis was suitable. Data from a total of 594 respondents from both Saudi Arabia and Malaysia were examined by using principle component factor analysis and varimax rotation. To derive a stable factor, each item must have eigen-value more than 1.0 and loading of 0.5 or higher on all items. Since no item had loading of less than 0.5 on all factors in management competency measurement, no competency was eliminated. This factor analysis yielded two set of factors, “work competency” and “interpersonal competency,” as shown in **Table 2**. These explained 58 percent of the variance in the competencies.

**Table 2: Rotated Component Matrix -- Managerial Skills and Competencies Measured.**

ITEM	MANAGERIAL SKILLS AND COMPETENCIES MEASURED	WORK COMPETENCY	INTERPERSONAL COMPETENCY
1	Ability to plan and organize	0.77	
2	Ability to implement work strategically	0.75	
3	Ability to analyze problems	0.74	0.26
3	Ability to make decisions	0.70	0.26
4	Ability to solve problems	0.66	0.41
5	Ability to initiate new ideas	0.61	0.27
6	Ability to build interpersonal relationship with others	0.32	0.85
7	Effective oral communication skills	0.32	0.69
8	Ability to adapt to new situations	0.32	0.66
9	Effective written communication skills	0.43	0.56
10	Ability to lead team members	0.51	0.52

Eigen-value cumulative		5.27	1.10
Percentage		33.53	58.00

Notes: *Rotation converged in three iterations: extraction method, principle component analysis; rotation method, varimax with Kaiser normalization.*

MANOVA is carried out to analyze the differences between the Saudi and Malaysia sample for the two factors of management competencies, “work competency” and “interpersonal competency.” The results are summarized in **Table 3**.

**Table 3: Summary of the Hypothesized Differences in Management Competencies.**

DEPENDENT VARIABLES	HYPOTHESIS	RESULT CONFIRMED	MANOVA TESTING
Work Competency	Malaysian higher	Yes	Malaysian higher
Interpersonal Competency	Malaysian higher	No	No difference

The findings show that the hypothesis is accepted for the case of work competency, but rejected for interpersonal competency as shown in **Table 4**.

**Table 4: MANOVA Test: Differences in Management Competencies.**

SET OF VARIABLES	MEAN SCORES (SD) SAUDI ARABIA (n=445)	MEAN SCORES (SD) MALAYSIA (n=149)	F	p
Work Competency	4.99 (0.78)	5.24 (0.60)	12.99	0.00*
Interpersonal Competency	5.16 (0.66)	5.21 (0.80)	0.53	0.45

\*  $p > 0.001$

STEPWISE-regression analysis has been conducted to determine whether background variables, particularly work experience, and cultural factors are significantly related to the two management competencies. The results show that only two of the cultural factors – individual success and social power – and job title have significant influences on both work and interpersonal competencies. As shown in **Table 5**, social power ( $\beta = 0.32$ ) is a variable with the most significant effect on work competency, followed by individual success ( $\beta = 0.25$ ), job title ( $\beta = 0.19$ ) and the dummy variable (Saudi – 1, Malaysia – 0), country ( $\beta = 0.12$ ). This analysis has demonstrated that the impact of all four variables on work competency is, on the whole, relatively strong, explaining 29 percent of variance ( $R^2 = 0.29$ ).

**Table 5: STEPWISE regression on Work Competency.**

INDEPENDENT VARIABLES	MODEL 1	MODEL 2	MODEL 3	MODEL 4
Social Power	0.45**	0.42**	0.32**	0.32**
Job Title	--	0.21**	0.21**	0.19**
Individual Success	--	--	0.21**	0.25**

Country	--	--	--	0.12**
<b>R<sup>2</sup></b>	0.20**	0.24**	0.28**	0.29**

\*  $p > 0.01$ ; \*\*  $p > 0.001$

For interpersonal competency, social power ( $\beta = 0.29$ ) has again the most significant impact. It is followed by individual success ( $\beta = 0.28$ ) and job title ( $\beta = 0.12$ ). All three variables, on the whole, have significant relationship to interpersonal competency, explaining 23 percent of the variance ( $R^2 = 0.23$ ). The details of the result is shown in **Table 6**.

**Table 6: STEPWISE Regression on Interpersonal Competency.**

INDEPENDENT VARIABLES	MODEL 1	MODEL 2	MODEL 3
Social Power	0.41*	0.31*	0.29*
Individual Success	--	0.21*	0.28*
Country	--	--	0.12*
<b>R<sup>2</sup></b>	0.17*	0.22*	0.23*

\*  $p > 0.001$

## DISCUSSIONS ON MANAGEMENT COMPETENCIES

Results from the data analysis suggest that Malaysia MBA students have more work competencies (e.g. planning, making decisions, and solving problems) than the Saudi MBA students, but also have high level of interpersonal competencies (e.g. communication skills, adaptability, etc.). There are several explanations for this result. First, the comparatively weak work competency level of the Saudi MBA students may be attributed to the limited quality and standard of the Saudi higher education in comparison to Malaysia. The government in Malaysia has in the last decade adopted a new educational policy to improve the quality as well as the “international competitiveness” of its universities and students (Malaysian Public University Grants Committee, 2017). This initiative has paid-off. The MBA programs of Malaysian universities are currently well-recognized internationally.

Malaysia MBA graduates have better work competencies in part because they are “assertive, decisive, and aggressive,” and able to make decisions on their own (Bennis & O’Toole, 2016). Individual success is another cultural factor which has a positive influence on work competency. This result is supported by the study of Rodsutti (2017) who explains that managers with self-actualization are able to see the value of their work. The notion of individual success is important to these managers, and they know how to use their skills and capabilities to explore new ideas and achieve results. These managers who live in a culture that is achievement oriented are expected to be decisive and capable of making decision on their own (Eliot, Goodwin & Goodwin, 2016). This culture is also the characteristic of Malaysia MBA graduates. Finally, a third explanation can be viewed in term of the differences in the background characteristics of the Saudi and Malaysia MBA students. Out of three background variables most relevant to management competencies – age, job title, and work experience – job title has a significant impact on work competency. People with high-job responsibilities need to possess not only work but also interpersonal competencies to get their job done efficiently and effectively. This is reflected by the result from the regression analysis (Tables 6 and 7) which shows that job title has a coefficient  $\beta = 0.19$  in relation to work competency and  $\beta = 0.12$  in relation to interpersonal competency. Essentially, the majority (around 60 percent) of the Malaysia MBA respondents are professionally experienced in middle and top management. Most Saudi MBA respondents are, however, at the staff level and have lesser job responsibilities than the Malaysia MBA students. For this reason, the result shows that Malaysia MBA students have high level of proficiency in both work and interpersonal competencies.

Additionally, the result of the dummy variable “country” from the regression analysis confirms that the MBA students in Malaysia, on the whole, have higher level of work competency than the MBA students educated in Saudi Arabia. The variable, however, has no significant relation to interpersonal competency. It is also indicated from the results that work experience of the MBA students has no significant influence on both work and interpersonal competencies. The findings from ANOVA, nevertheless, demonstrates that there are significant differences in work competency (sig = 0.00) and interpersonal competency sig =0.05) in relation to the level of work experience. For example, MBA students with only up to five years of work experience have lower levels of both work and interpersonal competencies (4.91 and 5.09, respectively) than those MBA students with higher years of work experience. The MBA students with work experience ranging from 16 to 20 years have the highest level of proficiency in work and interpersonal competencies (5.46 and 5.45, respectively). These results are shown in **Table 7**.

**Table 7: ANOVA (*F* -test): Differences in Management Competencies in Relation to Work Experiences.**

MANAGEMENT COMPETENCIES	WORK EXPERIENCES					<i>F</i>	<i>p</i>
	1-5 years	6-10 years	11-15 years	16-20 years	Above 20 years		
Work Competency	4.91 (0.77)	5.00 (0.67)	5.22 (0.72)	5.46 (0.67)	5.14 (0.94)	7.42	0.00**
Interpersonal Competency	5.09 (0.82)	5.14 (0.74)	5.24 (0.68)	5.45 (0.66)	5.27 (1.01)	2.37	0.05**

\*  $p > 0.05$ ; \*\*  $p > 0.001$

On average, the Malaysian respondents have more than ten years of work experience, while their Saudi peers have worked only for six years. According to the ANOVA analysis, MBA respondents with work experience over ten years have significantly higher levels of management competencies than those with lesser years of work experience. Based on this fact, it can be implied that, with the combination of MBA study and more years of work experience, Malaysian MBA students possess management competencies 577 more capabilities to develop both work and interpersonal competencies required of a manager. For interpersonal competency, the result from MANOVA test shows that both Saudi and Malaysian MBA students have a high level of interpersonal competency. This can be explained from the cultural point of view. Saudi Arabia is “relationship-oriented” with high value for social and interpersonal interactions (Al-Gahtani, 2016). They prefer “a nonassertive, polite type of personality,” expressed through interpersonal approaches, e.g. communication, interpersonal skills, and adaptability. For this reason, MBA graduates in Saudi Arabia and Malaysia should be able to attain a high level of interpersonal competencies.

## IMPLICATIONS OF MANAGEMENT COMPETENCIES FOR MBA PROGRAMS

The findings of this study have important implications for MBA programs offered in business schools in Asia, especially in Malaysia and Saudi Arabia. Essentially, the study finds that both Saudi and Malaysia MBA students are already proficient in interpersonal competencies. However, work management competencies are found to be limited in Saudi Arabia. One of the implications for business schools in Saudi Arabia is to improve the value of their MBA programs. They will need to put more emphasis on the work competencies in their curricula in order to enhance such management competencies, e.g. ability to implement work strategically, to plan and organize, etc. in the Saudi MBA graduates. They will need to improve their learning delivery of these competencies and redesign their curricula to serve the needs of the global business. They will need to augment their instruction with extensive practical experience in the development and implementation of these required work competencies as described in **Table 1**. Unlike Saudi Arabia, Malaysian business schools have been more successful in teaching their MBA students the required work competencies or “hard skills”, e.g. abilities to make decisions, solve and analyze problems (Malaysian Graduate Management Admissions Council, 2017). Practical learning experiences are offered in the MBA program through series of workshops (e.g. team building), in which processes of team interaction are used to improve such work

competencies as planning and organizing, problem solving and group decision making. At the University of Malaysia, an interactive and innovative learning experience is provided through the “Leadership challenge” workshop, which enhances the MBA students’ full leadership potential, so that they are equipped to take senior management positions upon graduation. Additionally, Saudi business schools will also need to reconsider their selection relating to the overall qualification of MBA applicants.

Malaysian MBA students show that they are professionally experienced with higher job responsibilities than their Saudi peers. Malaysian business schools are able to cater their professionally experienced students with in-depth knowledge of management skills as required for middle and top managers. In Saudi Arabia, the majority of MBA students are support staff. These students are moving from entry level specialized positions to those with broader responsibilities. To provide these less experienced students with specific management capabilities, Saudi MBA program will need to separate these students from their more professionally experienced classmates and place them in classes that focus more on work competency. For MBA students who are managers, Saudi business schools will need to offer a flexible MBA program, from which these experienced students can select additional electives that provide management competencies specifically required by their work and career development (Commission on Higher Education, Ministry of Education of Saudi Arabia,2015).

## CONCLUSION

This study contributes to the literature on management competencies needed in Asia, based on MBA programs, especially in Saudi Arabia and Malaysia. Understanding the relative importance of the required management competencies is critical for the successful development of managerial talent in the students. The MBA programs should emphasize the relevancy of work and interpersonal competencies in developing their curriculum in order to better align the management educational experience with the needs of globalized business. Business schools in Malaysia have been better in preparing the students with the competencies needed because they meet global standards. However, the MBA programs in Saudi universities must place greater emphasis in providing a higher level of work competences to their MBA students. To determine which particular competencies are presently required in the MBA program in Saudi Arabia, the “competency gaps,” between proficiency levels of MBA students’ existing competencies and the competencies required of future managers in Saudi business corporations should be assessed. More importantly, Saudi MBA programs should attain international standards or accreditation to match the level of business education in Malaysia.

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# CONTINUED CALIBRATION: THE MORPHOLOGY OF EVOLVING US HOTEL B2B SALES MODEL

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## ABSTRACT

*This paper recalibrates a theoretical hotel B2B sales model based on a review of the literature, followed by a qualitative case study. Data was collected by interviewing purposefully selected participants with extensive experience with B2B collaborative relational exchange, in the US hotel ecological community. The findings show that the US hotel ecological community who participated in this study are reinventing their go-to-market models by creating networks of allied and partnered firms collaborating as integrated entities, rather than competing as self-contained firms, in co-creating and exchanging value with exchange partners.*

**Keywords:** B2B hotel sales model, hotel ecological community, US.

## INTRODUCTION

H. G. Wells, a lifelong optimistic observer of progressing technological developments, opined in his 1946 final publication, *Mind at the End of its Tether*, his end-of-life pessimistic view of *Organic Evolution*:

*“... as an urge to exist so powerful that every form it takes tends to increase in size and numbers and outgrow its supply of food. ... The bigger aggregations or individuals eliminate the smaller and consume more and more. ... eliminating species and genera ...”* (The Literary Executors, 1996, p. 48).

This study draws an analogy between the competitive ecological communities found in nature and business ecological communities. In nature, species compete for resources in the food chain and in the contest of reproduction. In business, organizations compete in the value chain and in the contest for market share. Nature exhibits varying symbiosis interactions between species within their ecological communities. These range between parasitism through mutualism arrangements which influences their competition strategies. Business exhibits varying competitive positions between organization within their business ecological communities - within their industry marketplaces – influencing their competitive strategies. These competitive positions have been commonly delineated as: market leaders, followers, challengers and nichers. It appears that both the natural order and business organization seek analogous competitive positions: One to survive, flourish, and replicate genes and the other to survive, grow, and achieve profitability.

Today, we see significantly growing mergers/acquisitions and marketplace domination. In the hotel industry, the world's four top corporations measured by room count (Weinstein, 2018) - Marriott, Hilton, IHG, and Wyndham – dominate and have recently expanded brands in their portfolio, global countries served, market share, and complexities of their value chain networks. Further, they are reinventing their go-to-market (sales/marketing) configurations. These top hotel corporations are beginning to create networks of allied and partnered firms competing

as integrated entities versus competing as self-contained firms. This is in line with the general trend in sales organizations (McNeill, 2017; Storbacka, Ryals, Davies, & Nenonen, 2009; Wang & Brennan, 2014; Zimmerman, 2018). This change is prompted by a changing environment, and in response different customer needs (Cheverton, 2015; Zimmerman, 2018). These differentiated approaches are essential to nurture profitable, long-term, repeat business, contrary to discreet, singular transactions (Cheverton, 2015; Wang & Brennan, 2014; Zimmerman, 2018). As these networked webs dominate the other hotel corporations and independent freestanding hotels, they do appear to channel H. G. Wells, (1946) "...The bigger aggregations...eliminate the smaller...eliminating species..."

## Purpose

This paper examines the evolving B2B sales/marketing structures in the US hotel industry as currently developed in top-tiered hotel corporations. Building upon a research model (McNeill & Nienaber, 2018), this paper has answered the research challenge to further refine the model and understanding. We have done so by literature review and conducting qualitative interviews with B2B industry sales/marketing professionals working within the ecosystem to which the top hotel corporations mentioned above belong.

The research question guiding this study is: "What is the state of the art of B2B hotel sales structures and organizational practices? How can we design a descriptive model?"

The limitations of this study include that these are practices in top US hotel corporations with resources to implement such a model. Smaller hotel entities cannot duplicate and tend to rely on past practices.

## LITERATURE

Organizations use strategy to attain their goals. Strategy is multileveled, and to ensure success the different leveled strategies should be aligned (Pettigrew, 1987). Corporate strategy answers questions about where the organization should compete, sets direction, guides action, and demarcates the scope of business (Porter, 1980, 1985). As such, the corporate level strategy identifies the business ecosystem where the organization competes, inclusive of ecosystem members. Generally, corporate level strategies include strategic alliances, partnerships, franchising and *coopetition* (a neology combining the terms, *competition and collaboration*) (Fernandez, Chiambaretto, Le Roy, & Czakon, 2019). These strategies are considered *relational exchange* strategies, where partners pursue both mutual and individual goals, in co-creating and exchanging value (McNeill & Nienaber, 2019). These corporate strategies are often practiced under the term, *key account management* (KAM) (McNeill & Nienaber, 2018a). However, these strategies often result in high failure rates, due to *competition* encroaching upon (through occasional opportunism) the mutual value created. *Coopetition*, observes Bradenburger and Nalebuff (1996), is a duality and balance of value creation and capture. Creating value is basically a *collaborative* process between interacting entities, entailing cooperation and coordination of value creating activities. Capturing value is basically a *competitive* process. And, often a *value-pie*, expanded by collaborative partnerships, can result in a competitive contest among creating partners and allies regarding its proportional division (Bradenburger & Nalebuff, 1996). *Coopetition*, with upfront relational understandings, attempts to mitigate the effect of competitive opportunism.

Competitive strategies answer questions about how organizations should compete to ensure winning market positions (Porter, 1980, 1985). *Market positions* are commonly classified as: Market leader, follower, challenger, and nicher (Gilligan & Wilson, 2009). Porter famously classified *competitive strategies* as differentiation, cost leadership, and focus (niche) (Porter, 1980, 1985). To be effective, these strategies should be based on *competitive advantage*, meaning that the organization performs the *value chain activities* (implementing actions, both intra- and inter-organizational) differently or better than the competition in attracting customers (Porter, 1985; Gilligan & Wilson, 2009). However, today there are many misunderstandings about role of competitive strategies in competition (Magretta, 2012).

Magretta (2012) points out that competition (a) is about being unique – not the best, (b) is a contest over profits – not a battle between rivals, (c) is about choosing to make some customers unhappy – not being all things to all customers, and (d) competitive success can be explained by one core *competence* – that *one* thing which a company

does really well – good strategies depend on the connection among many things, many activities and processes (implementing actions), on making *interdependent* choices. It stands to reason that these interdependent choices include both inter-organization and intra-organizational role players in the business ecosystem.

This study examines the morphology - structure and intra-specific and inter-specific relationships between activities and processes - of a human-created *species* (specifically, a hotel corporation) struggling for fitness and survival in a business ecological community. The authors of this study focus, on the morphology of evolving hotel B2B sales model. The authors believe that all organisms, from the simplest in nature to the complex – biological humans augmented by their technology and organizational artifacts - follow similar rules of nature. Thus, the authors observe instructive ecological definitions of intra- and inter- species interactions in nature to guide the refined model of hotel B2B sales organizations presented in the “Discussion” section of this paper.

Below, we first lay the foundation for an evolving a hotel B2B sales model by a discussion of relational interactions in the ecological community of biological organisms (Wootton & Emmerson, 2005). Second, we draw direct parallels to biological realities to business ecological community where we observe similar behaviors and structures albeit translated to business vocabulary.

While there are several major types of species relational interactions, in this study, the authors focus on two major and analogous types which are especially useful in describing an ecological community: In nature, *Symbiosis* competition and interaction variants, mutualism through parasitism and in business, *Coopetition* – competition and collaboration.

## ***Symbiotic Relational Interactions: Ecological Community Biological Realities***

Organisms, including humans, live within an *ecological community*. An ecological community can be defined as an assemblage of populations of at least two different species that interact directly and indirectly within a defined interactive, usually geographic, area. Human organisms, along with their technological artifacts, uniquely possess the capability to virtually interact across space and time. These interactions form the basis for many ecosystem properties and processes underlying a species survival. Species compete and interact either and sometimes both: (a) intra-specific – between individuals of the same species or (b) inter-specific – between two or more aggregates of individual species (Lang & Benbow, 2013).

*Competition*, in nature, is a general state of interaction among individuals and/or aggregates of individuals contending for a limited supply of a commonly required resource. This rivalry between individuals or groups for commonly desired object(s) usually results in a winner and a loser but does not necessarily involve the destruction of the loser (Dictionary.com, 2019). *Competitive exclusion* can occur overtime when a superior competitor eliminates an inferior one from the competition arena. However, some ecological models show that the population density carrying capacity of any given competitive arena or geographic area may result in either competitive exclusion of either of the competing species or that either species have sufficient densities to survive and reproduce (their intra-specific is stronger than their inter-specific competition) (Lang & Benbow, 2013). In this state, they can *co-exist* in the same space with or without mutual interaction.

*Symbiosis*, in nature, while encompassing general *competition*, is an umbrella term of a range of interactions among species – both inter- and intra-specific interactions – that more granularly describes inter-species interactions. *Symbiosis* refers to situations where two or more species live in *purposeful* and direct contact with each other. There are three major forms of symbiosis: mutualism, commensalism, and parasitism. **Note:** The umbrella term, *symbiosis*, is often mistakenly used as a synonym for one of its sub-components, *mutualism* (Begon, Harper, & Townsend, 1996).

*Mutualism* – analogous to *collaboration* in the business ecological community - in evolutionary biology is a form of reciprocal altruism which is a behavior whereby an organism acts in a manner that temporarily reduces its fitness while increasing another organism's fitness, with the expectation that the other organism will act in a similar manner at a later time (Begon et al., 1996). Mutualism or interspecies reciprocal altruism is a long-term relationship between individuals of different species where both individuals or species benefit. Mutualistic relationships may be either *obligate* (one or both entirely depend on each other for survival) for both species, obligate for one but *facultative*

(each could live independently and without the other) for the other, or facultative for both. Generally, in business language, *collaboration*, is a two-way value co-creation.

*Commensalism* – which could be viewed as analogous to *consultation* in the business ecological community – is an interaction where one organism or species beneficially affects a second organism or species but the second has no effect (good or bad) on the first (Begon et al., 1996). Generally, in business language, *consultation* is a one-way advice from an expert source. An example of commensalism is an orchid plant growing on a tree branch needs the tree for support only - not nourishment. The tree can live without the orchid – one benefits and the other is not “significantly” harmed or helped.

*Parasitism* – analogous to an extreme form of *competition* (destructive *opportunism*) in the business ecological community – is a symbiotic relationship where one organism, the parasite, benefits while the other organism, the host, is harmed. A familiar and intentionally vivid example is a tapeworm (parasite) living in the bowels of another creature (host) and eating the host’s digesting food. Generally, in business language, *competitive opportunism*, is a win/lose situation where one organism desires to take the entire value-pie – it is a zero-sum game.

## **Coopetition Relational Interactions: Business Ecological Community Parallels**

The business ecological community is reflected by Easton et al.’s (1993) taxonomy of different forms of relational interactions of business entities: *Contention*, *Competition*, *Co-existence*, *Cooperation*, and *Collusion*. From pole to pole along this continuum, *Contention* (wrangling, arguing, and gain-striving) is almost a stale-mated contest of frozen negotiating positions. And, the opposite pole, *Collusion* is a form of highly coordinated and generally illegal relational interaction in the United States. This way of thinking – striving for oligopoly or even monopoly – may be an unconscious, albeit unacted-upon business entity goal especially when managers reflect on Porter’s work (1980 and 1985) that all business strategy aims for a single measurable goal: Excess profits. He defines *Competitive Advantage* as that which makes an entity’s goods or services superior to *all* of a customer’s other choices.

The authors of this study modify Easton et al.’s (1993) taxonomy of relational exchanges: *Co-existence*, *Competition*, *Consultation*, *Collaboration*, and *Collusion*. The polar extremes of this taxonomy are not applicable to this study: *Co-existence* is a quasi-neutral relational interaction space – where two or more entities exist together and may or may not have any mutual interactions. And, as mentioned earlier, *Collusion* is illegal. Thus, for purposes of this study, the authors focus on two forms of relational interactions within their taxonomy: *Competition* and *Collaboration*. However, before the authors discuss *competition* and *collaboration* in the business ecological community, it is necessary to briefly address the encapsulating term, *coopetition*, that was referred to earlier. This specific term will *not* be fully addressed within this study. However, it will be one of the recommendations for future research specified at the end of this paper.

**Coopetition in Business.** This neologism, combining the words *competition* with *collaboration*, must be mentioned as it has become another way of viewing the relational exchange continuum between competition and collaboration (Brandenburger & Nalebuff, 1996; Gurău, Chiambaretto, & Le Roy, 2019). Both competition and collaboration simultaneously exist in varying coopetition mixtures all along the relational exchange continuum. It is a duality. Creating value is basically a collaborative process between interacting entities. Capturing value is basically a competitive process. A business co-creates value by aligning its value chain – customers, suppliers, employees, and others. But, with an expanded value-pie, there arises a situation of how to divide the pie among the co-creators. Businesses compete with one another for market share and customers. Similarly, members of a networked value chain also want, and compete for, their share of the pie. This dual nature of simultaneous competition and collaboration is, *coopetition* (Brandenburger & Nalebuff, 1996).

**Competition in Business.** Contained within the term, *coopetition*, *competition* is an effort to capture a share of a value-pie co-created by the interactions of collaborating entities (Brandenburger & Nalebuff, 1996). The etymology of the term, *compete* (The Online Etymology Dictionary, 2019), provides definitions which may indicate a deeper understanding and examine today’s evolved and, perhaps more limited, meaning: In classical and Late Latin, from *com* (“with, together”) plus *petere* (“to strive, seek, fall upon, rush at, attack”) combines into *competere*, “strive in common, strive after something in company with or together.” According to the Oxford English Dictionary (2019),

rare 17<sup>th</sup> century and revived from late 18<sup>th</sup> century, the term is sensed to mean, “to strive (alongside another) for the attainment of something.” The marketplace sense and use of the word from the 1840s (regarded in Britain as a Scottish or American word). Compete acquired its athletics sense of the word by 1857.

Translating Wells’ observations (The Literary Executors, 1996, p. 48) from the organic realm to the world of business, Porter stated in *Competitive Advantage* (1985), that all business strategy aims for a single measurable goal: Excess profits. He defines *Competitive Advantage* as that which makes an entity’s goods or services superior to any of a customer’s other choices. Classic economic theory idealizes *Perfect Competition*; eliminating market entry barriers. Porter, restating research from his 1980 book, *Competitive Strategy*, describes five-forces of market barriers where a company could create *Imperfect Competition* and erect market barriers to create a sustainable competitive advantage and, thus, excess profits (Stewart, 2015). Thus, in both *Competitive Strategy* and *Competitive Advantage*, Porter *might be* read as advocating a firm’s ideal ambition to work toward a monopoly or membership in an oligopoly *sans* the threat of prohibiting government restrictions.

In both his 1980 and 1985 work, Porter describes three generic strategies for achieving competitive advantage: (1) Cost Leadership, (2) Differentiation, and (3) Focus (or Niche). In his 1985 *Competitive Advantage*, he gives special attention to the differentiation strategy and introduces a way to bridge the gap between strategy and implementation; a way to put generic strategy into practice. This gap is closed, states Porter, by *activities*, synonymous with the term processes in reengineering literature. And, these activities are both inter- and intra-organizational activities.

He introduces the now common concept of *Value Chain* and defines this chain as a disaggregation of buyers, suppliers and the firm itself which are discreet but interrelated activities from which value is derived. He states:

*The Value Chain provides a rigorous way to understand the sources of buyer value that will command a premium price [thus, is differentiated] and why one product or service substitutes for another. A strategy is an internally consistent configuration of activities that distinguishes a firm from its rivals (Porter, 1985, p.xv.).*

Porter’s (1985) view is an activity-based theory of the firm. To compete in any industry, companies must perform a wide array of activities such as processing orders, contacting customers, assembling products and train employees. *Activities* are narrower than functions such as marketing or R&D and they are what creates value for buyers. They are, states Porter, the basic units of *competitive advantage*. As we will see, they are also the basic units of *collaborative advantage* as implemented in both inter-and intra-organizational networks of relationships and processes (Dyer, 2000).

Above, Porter addresses, *competitive strategies* in the business marketplace. But, what are these businesses attempting to do? They are jockeying for *market positions* – the business organization’s position within the marketplace or industry where they interact with other species or defined competitors. Gilligan and Wilson (2009) restate a well-researched categories of market positions: *Market Leaders*, the one firm in a business industry that is recognized to be the leader. Its recognized dominance usually provides a benchmark for other companies in the industry. A distinction of leadership can be drawn between mere size of the leader and its thought leadership and based on variables such as innovation and different patterns of thinking. *Market Challengers* and *Followers* are usually smaller, in market share terms, firms. Challengers may choose an aggressive approach – attacking other industry firms including the leader. Followers may adopt a less aggressive stance and preserve the status quo – it is sometimes wise to remain a profitable number two in the industry. *Market Nichers* are firms that choose to specialize in areas of the industry and marketplace that are too limited in size to be of significant interest to the larger firms. They can concentrate their efforts and build-up knowledge and avoid expensive head-on fights with larger companies. And, this approach can be very profitable.

Thus, competition is about businesses knowing the industry and marketplace (Ecological community) in which they compete and rationally deciding their industry/marketplace position. Then, they must decide the competitive strategies they will deploy to capture value within the marketplace.

**Collaboration in Business.** As mentioned, contained within the term, *coopetition*, *collaboration* co-creates a value-pie through the relational exchange and interactions of networked entities. Businesses co-create value by

aligning their value chains – customers, suppliers, employees, and others. Competition is the process that captures or divides-up this co-created value among the networked value-chain (Brandenburger & Nalebuff, 1996). *Collaboration* in relational exchange and interactions suggests that relational partners collectively work in co-creating and exchanging value to achieve a common goal. This common goal is something new and all relational exchange partners, in varying degrees, gain. This gain, however, is not limited, singularly to the common goal. The gain so obtained, also permeates to partners' individual goal achievement, to some degree. However, this gain may not be equally distributed. Moreover, successful collaboration requires relational partners to *cooperate* and *coordinate* their activities. *Cooperate* denotes relational partners functioning jointly in support of each other's individual goals. *Coordination* signifies executing value exchanges, guided by rules or norms, in pursuit of both common and individual goals; which may involve the adaptation of at least one partner. While the concepts collaborate, cooperate and coordinate are interrelated, they are distinct. Collaboration is reached at the height of relational exchange, but incorporates the two enabling concepts, i.e. *cooperation* and *coordination*. In addition, both coordination and cooperation intensify as collaboration intensifies (McNeill & Nienaber, 2019).

## The Hotel Business

**Hotel Industry Context.** What is a hotel? According to *Business Dictionary* (2019), a hotel is, “a commercial establishment providing lodging, meals, and other guest services. In general, to be called a hotel, an establishment must have a minimum of six [rentable] letting bedrooms, at least three of which must have attached [in-room] private bathroom facilities.” **Caveat:** Statistics below should be considered close approximations as often they vary from other sources due to different definitions of measurement units. For example, (1) Is hotel revenue measured only from rooms or inclusive of food & beverage and other services and (2) What is the definition of a hotel used by statistic gathering sources; STR Global (2019) defines a hotel as 15 rooms plus in the US and as 10 plus outside the US?

Measured in total revenue the worldwide the hotel industry is huge. The global hotel industry falls under the umbrella of the global hospitality industry which, in turn, falls under the umbrella of global travel and tourism industry. The entire travel and tourism industry obtains total revenue from both consumer (B2C markets) and business (B2B) markets. The hospitality industry specializes in accommodations including lodging, food & drink, and wellness. The global travel and tourism industry contributed 7.61 trillion U.S. dollars to the global economy in 2016. Global hotel retail value in 2017 was 570.18 billion USD with USA hotel revenue of 208 billion USD (Statistica, 2019).

How many hotels are there in the world? Again, statistics metrics vary and most observers do not know as there are many small lodging accommodations not reported and many forms not formally defined as hotels and appearing/disappearing daily. But for approximation, STR Global (2019) estimated that there were 190,000 hotels globally comprising 17.5 million rooms – Average size of hotel, 85.5 rooms.

Today's large hotel business organizational structures are unique and not that commonly perceived. Large and familiar hotel corporations, such as *Marriott International* (MAR stock symbol) and *Hilton Worldwide* (HLT stock symbol) are *asset-light* C-corporations, that is, they do not own hotels (the brick & mortar) (Seeking Alpha, 2018). Today, large hotels earn corporate revenue primarily through management contract fees (largest revenue source), and franchise fees (smaller), and an even smaller revenue from very few corporate owned hotels (see Giannoukou, 2016). They are legally divided into one *asset-light* C-corporation and one *asset heavy* REIT. The C-corporation is a *hotel operator* (primarily a management company) and on the growth side of the business with higher margins and lower leverage - they flexibly seek new management contracts. The REITs operate by owning assets, collecting the revenue, and paying a set percentage to the management company – they tend to be less nimble and have slower growth rates than the C-corporations (Seeking Alpha, 2018). Trends over the last 20 years record acceleration of hotel industry consolidation and rethinking organizational structures and strategies. These trends appear to be led by *Marriott International* (Whitmore, 2018) – in Gilligan and Wilson (2009) terms, industry/marketplace positioned: *Market Leader*.

**The Pareto Principle in Hotel Industry/Marketplace Positioning.** The increasingly growing 20% of hotel corporations seem to have a competitive strategy to capture 80% of the marketplace business ecological community. A few hotel giants dominate the hotel industry. The top hotel recognizable names in the world ranked by number of rooms are in order: *Marriott International, Inc.* (USA-based), *Hilton Worldwide* (USA-based), *IHG, International*

*Hotel Group*, (UK-based), and *Wyndham Hotel Group* (USA-based). Ranked by number of hotels, the ranking shifts: Marriott #4, Hilton #6, IHG #5, and Wyndham #1. Note that in 2018, The hotel industry *Market Leader*, USA based and globally deployed, *Marriott International*, accounted for approximately 10.7% or \$22.3 billion of total hotel revenue attributed to United States hotels and hotel corporations (Statistica, 2019).

**Hotel B2B Sales.** Based on the foregoing, hotel B2B relational exchange can be summarized as a (i) progressive (evolving), economically focused collaborative process where (ii) several interacting partners, with both common and individual interests, willingly and purposefully interact with each other across organizational boundaries, (iii) according to their varying relationship strengths and degrees of integration, (iv) by combining resources with a view to co-create and exchange value over their relationship lifecycle to (v) achieve a competitive advantage (McNeill & Nienaber, 2019). As such, it falls in the scope of the above-mentioned definition of relational exchange and is thus consistent with a corporate strategy of collaboration, which manifests as KAM. The key account manager is charged with the responsibility of the successful/profitable KAM. KAM entails all activities related to the identification, selection, deselection of relational exchange partners as well as the implementation of a successful key account program (Cheverton, 2015; Zimmerman, 2018). It stands to reason that B2B hotel relational exchange focuses on the 20% of *fit* customers, contributing 80% of top-line revenue (McNeill & Nienaber, 2018b). Consequently, like any other strategy, hotel B2B relational exchange is not suitable for all situations. Ideally, it lends itself to complex situations, products and/or services. Moreover, like all strategies, hotel B2B relational exchange has a high failure rate, as mentioned before. This may have devastating consequences for hotels as B2B relational exchange represent a sizeable portion of top-line revenue (McNeill & Nienaber, 2018a). Hotel B2B relational exchange failures, like generic counterparts, are commonly ascribed to (i) lack of support from leadership, (ii) incoherence between corporate strategy and S/KAM; (iii) inadequate leadership support for customer alignment/integration, (iv) incompatible partners or (v) vulnerabilities caused by unsuitable/inappropriate team members (Zimmerman, 2018). Consequently, hotel organizations must choose their relational exchange partners as well as team members wisely.

The hotel B2B relational exchange failure can be reduced, by choosing an appropriate approach. This can be done by using an integrative model, which is anchored in theory, yet actionable for practitioners to bridge the theory-practice divide (McNeill & Nienaber, 2019).

## A Guiding Hotel B2B Sales Model

Such a model was returned by the literature search (McNeill & Nienaber, 2018b). On examining this model, it appeared to be congruent with both academic B2B relational exchange and practitioner literature. Hence, we used this model (McNeill & Nienaber, 2018b) as departure point for our discussions with B2B relational exchange practitioners in the hotel industry.

In summary, the model proposed by McNeill and Nienaber (2018b) consists of two main components i.e. relationship strength based on quantitative and qualitative exchanged value (Y-axis) and modes of inter-organization interaction (X-axis). The relative relationship strength of exchanged values between buyer/seller vary on a continuum from low to high. Relative relationship strength is based on value exchanged, as mutually agreed upon between collaboration partners (buyer/s and seller/s). Value can be either, or a combination, of economic (focusing on cost/price), functional (focusing on the solution to problems/needs), psychological (reducing risk, mitigating uncertainty, and lowering dependence) and meta (accessibility, responsiveness, keeping promises, understanding critical customer issues, communication, ease of doing business with, and competence, which foster commitment and trust among relational exchange partners).

Interaction (X-axis) can be categorized corresponding to different modes on an inter-organizational adaptation continuum representing the degree to which the organizations are integrated. These modes are transactional, consultative and collaborative/strategic (see McNeill & Nienaber, 2018b). Economic value exchanged is central in the transactional mode and thus the relationship revolves around price. Value exchanged in the consultative mode may still be mainly economic in nature, but also include functional value. Finally, in the collaborative mode, value exchanged moves to encompass functional, psychological and meta value, with a focus of reducing risk, uncertainty and dependence. Only customers that exhibit a strategic fit should be considered for developing into a collaborative relational exchange partner. Most importantly, strategic fit should aim at realizing *differentiation* in the market based

on, inter alia, business growth opportunities and potential to generate revenue, which are impacted by the judgement of the Key Account Manager.

## METHODOLOGY

As mentioned, the authors first conducted a literature review. The data bases *Ebsco* and *Proquest* were searched because they cover relevant sources, widely, as they collectively feature peer reviewed business journals, covering all disciplines, as well as industry journals. The search terms used were *B2B (hotel) relational exchange, and/or collaboration and/or coopetition*. Only a few articles were returned. Thus, the authors examined the references of the documents returned by the search to identify further sources, to ensure a comprehensive literature review. The documents thus retrieved were used in the literature review, presented in the previous section.

With the literature review complete, the authors tested the practical usefulness of the model, by employing a qualitative case study, in view of the limited information on the topic (Denzin & Lincoln, 2017). Relevant role players in US hotel B2B ecological communities, who had sufficient experience with B2B collaborative relational exchange, were purposively identified and approached to participate in the study. We selected the US because it is the world leader in the hotel industry, while B2B sales contribute significantly to top-line revenue as discussed in the previous section.

The purpose of the study as well as the aims and objectives were shared with the potential participants. In addition, they were notified that their participation is voluntary, on an anonymous and confidential basis. Furthermore, they were informed that they could withdraw at any moment without negative consequences. Thus, the study complied with ethical research principles. The study was also executed in a way taking care of trustworthiness (that is credibility, dependability, transferability) as discussed by Denzin and Lincoln (2017), to ensure that the conclusions drawn are valid, and thus contributing to knowledge creation.

Data was collected by interviewing participants at a time and location convenient to them, most often their place of work. Interviews lasted between 30 and 60 minutes. Interviews allowed for probing participants' responses to create shared understanding. There is no generally agreed upon norm for sample size in qualitative case studies. Sample size is guided by saturation, the point when no new information is revealed (Denzin & Lincoln, 2017). Saturation occurred at interview six, which is consistent with previous studies guiding sample size for qualitative case studies (Onwuegbuzie & Collins, 2007; Guest, Bunce, & Johnson, 2006). The participants represented areas like general management, sales director, revenue manager, group strategic management, sales account representatives. Their experience varied between 20 and five years in the hotel ecosystem.

The data was thematically analysed according to the themes of relational strength and modes of interaction, provided for in the literature. Data analysis were both and data driven. Concept driven analysis derived from theory, while data driven analysis provided for new ideas not provided for in the literature via open coding (Gibbs, 2011).

## FINDINGS

Results show that the leading U.S. hotel corporations – generally the largest in terms of numbers of discreet *brands* and with the most globally distributed individual properties - are the few hotel organizations that have both the scale and resources capable to implement the highly networked B2B sales structures described in this study's model.

(1) At the leading U.S. hotel corporations, *Sustained Competitive Advantage* (Porter, 1985) is being implemented by *Sustained Collaborative Advantage* (Dyer, 2000). In this configuration, individual hotel corporations no longer simply compete with other individual hotel corporations - they compete with *systems*.

The leading hotel corporations form into collaborating networks and compete with other collaborating networks. These networked aggregates combine intra- and inter-organizational activities collaboratively linking their *Value Chain* (Porter, 1985) of customers, employees, suppliers, and complimentary non-competitive product class vendors.



Porter (1985) states that *activities* and *actions* within the value chain close the gap between strategy and implementation - activities are the focus.

(2) The less well-resourced hotels are relegated to more traditional forms of B2B sales structures and must competitively struggle with each other, usually over price and occasionally over focused niche strategies. This follows the Pareto principle where 80% of, often commodity-like properties, generate 20% of total U.S. based hotel organizational B2B revenue.

Results show that the more highly evolved hotel B2B selling organizations, guided by the general business principle of striving to dominate their market space, are deploying a generic *differentiation* strategy (Porter, 1985) to significantly offer B2B target markets (customers) a long-overdue solution to economic exchange and relational exchange challenges traditionally experienced with hotels:

(1) Change the relationship between B2B customer demand and hotel supply. This is a relational change from customer and hotel sales person to customer and hotel integrated systems. Customers have relationships with stable and dependable hotel corporation systems versus multiple and sometimes transient hotel sales people.

(2) Provide reliable and consistent exchange processes in a primarily service industry where characteristics of *intangibility*, thus *variability* of hotel product/service, generates *uncertainty*. It should be stressed, that overcoming uncertainty is a key success factor for, usually significantly priced, hotel B2B sales.

(3) Overcome the problem of individual hotel property salesforces contacting the same potential B2B customer – this cacophony of contacts stimulates a prospective customer to question the organizational capabilities of the hotel firm in question and leads not only to irritation but to uncertainty.

Results also show that more highly evolved hotel B2B selling organizations simultaneously practice relational exchange methodologies ranging along a continuum from *competitive* through *collaborative* and sometimes combine both polar extremes to variably practice a neology term and form of relational exchange, *cooperative*.

Results further show that to effectively and efficiently practice the above relational exchange methodologies, the more highly evolved hotel B2B selling organizations disaggregate the selling organization into sub-segmented and specialized sales and sales support teams. Highly defined and enforced corporate policy guides these teams:

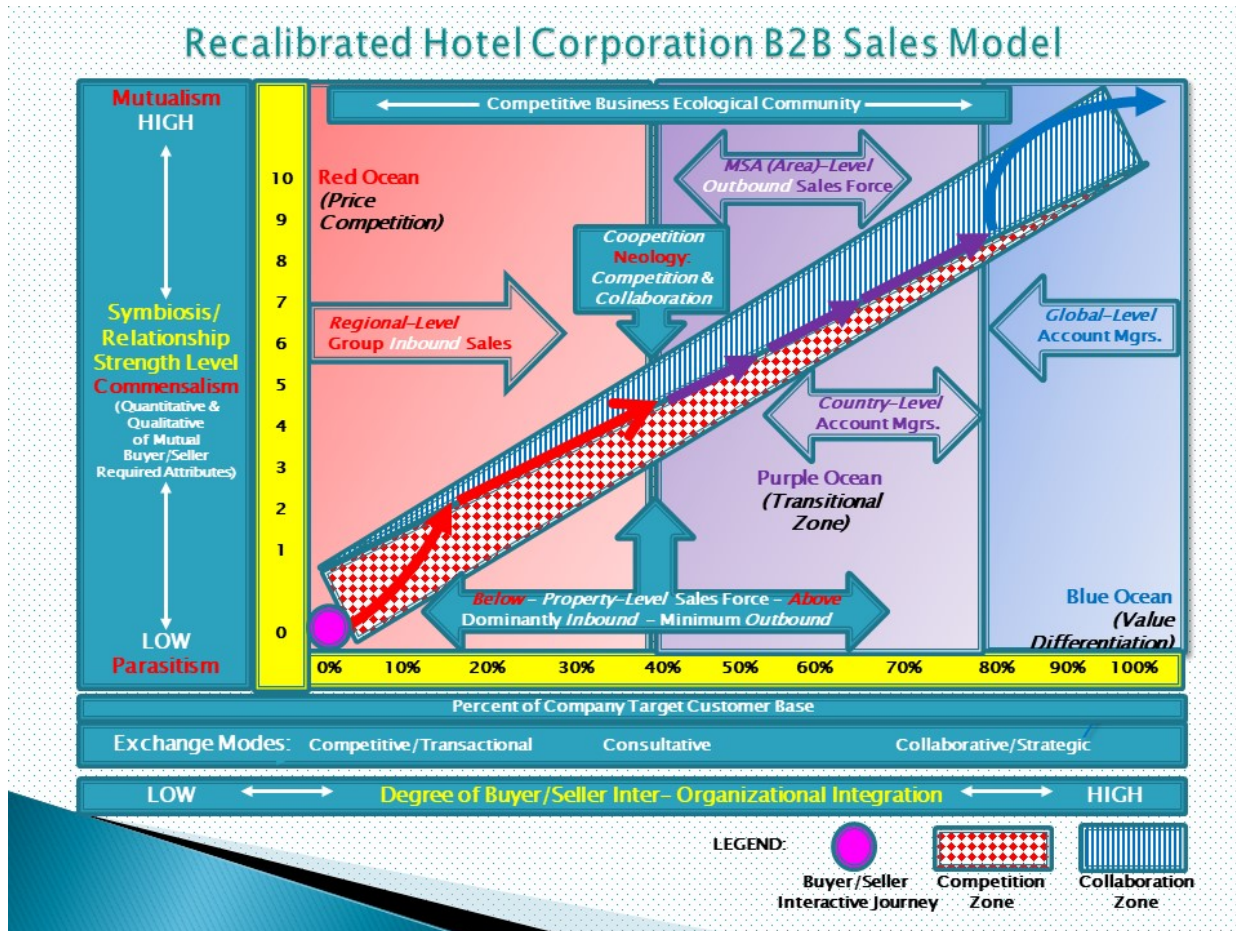
(1) To deploy to segmented target customer markets – For example, using a general Pareto principle, the top 20% of customers generating 80% of total B2B revenue have the most experienced sales teams deployed,

(2) To reduce costs incurred by salespeople in relationship investment for each target market engagement – For example, again using the Pareto principle, the bottom 80% of customers who generate only 20% of total B2B revenue have the least costly sales teams deployed. These teams, augmented by electronic tools, need to spend less personal costly communication time with each target market.

(3) Disaggregating and blurring the traditional role of a salesperson as both *hunter* (actively seeking new business) and *farmer* (servicing the customer after purchase) – For example, some of the sales teams (at hotel property-level) are primarily *farmers* who receive prospective new business opportunities from dedicated *hunters* (sales teams, “above the property” level) whose job is only to *hunt* and, then to direct opportunities to the hotel property *farmer* teams. Traditional sales person roles are blurred. Are property-level sales people really in *sales* or *service* function?

The above findings are reflected in the *Recalibrated Hotel B2B Sales Model* – Figure 1, below.

Figure 1: Recalibrated hotel B2B sales model.



(Source: McNeill and Nienaber)

## DISCUSSION

Referring to Figure 1, *Recalibrated Hotel B2B Hotel Sales Model*, the following discussion is a brief overview:

### 1. Layout: X Axis – Three Scales

- Percent of Company Target Customer Base*, refers to the Pareto (80%/20%) principle where 20% of target markets (customers) generate 80% of selling company revenue. The scale indicates the percentages of a companies identified target customer markets and they *Exchange Modes* (selling methodologies) a business will deploy. For example, in the *Blue Ocean* (80% to 100% range) a business is using a *collaborative/strategic* exchange mode to address this 20% of target markets – who seek value differentiation from the selling company.
- Exchange Modes* refers to selling methodologies – range of competitive/transactional to consultative to collaborative/strategic exchange modes. For example, in the *Red Ocean* (0% to 40% range) a business is using both competitive/transactional exchange modes to address 40% of target markets – who primarily seek price competition from the selling company. Note: 40% to 80% is a *Purple Ocean*, a transition zone from Red toward Blue Ocean where a consultative exchange mode is deployed as many of the target markets are developed and evolve toward the Blue Ocean.
- Inter-organizational Integration* refers to the degree that networks and interdependency between selling business and buying target market strengthen – and also throughout an organization's value-chain. Stated

earlier, Networks of Value-Chains (customers, suppliers, employees, etc.) are beginning to compete with each other – Network to network competition versus single isolated (non-networked firm) competing with other isolated firms. For example, in the *Red Ocean*, the bottom 10% of target market customers purchase through a *competitive/transactional* exchange mode. Their networked integration with the selling business is low. On the other hand, in the *Blue Ocean*, buying and selling organizations have a very high level of both intra- and inter-organizational networked relationships.

## 2. Layout: Y Axis = Two Scales

- a. *Symbiosis/Relationship Strength Level* refers to how strong relationships must be between selling business and target markets (on 0% - 100% X axis). High and Low is noted. Also, *Mutualism* (Symbiosis is High) and *Parasitism* (Symbiosis is Low and almost devoid of any relationship strength other than destructive competition).
- b. *Numerical Scale* – 0 to 10 refers to both Quantitative and Qualitative relationship attributes. Currently, and in future research, this scale will be developed.

## 3. Competitive Business Ecological Community (the competitive playing arena – marketplace) spans 100% of the customer base. It is divided into three zones – Red, Purple, and Blue – indicating three situational conditions: Zone of intense (bloody) price competition, Zone of transition, and Zone of value differentiation (where companies stake out unique competitive offerings that are difficult for industry competitors to duplicate).

## 4. Rising Left to Right 45 Degree Set of Arrows

Beginning with the circle symbol (representing the evolving/developing journey of the target market) in the lower left bottom, the path moves from undeveloped buyer to highly developed key account target markets.

## 5. The Cross-Hatched and Patterned Extended Triangles surrounding the upward sloping arrows indicates a varying mixture of *coopetition* – simultaneous mixture of *competition* and *collaboration*. The upper triangle represents *competition* and the lower triangle represents *collaboration*. This indicates that even as the upward sloping target market moves from exchange (selling) modes *competitive/transactional* and toward *collaborative/strategic*, *coopetition* is always present albeit exact proportions of the mix varies. General trending proportional change is indicated by size of the area of triangles immediately juxtaposed on either side of the upward sloping arrow indicating the target market developing/evolving path. For example, on X axis at 80% of the company's target market base, a line can be drawn to intersect the sloping 45 degree arrows – at this point it will be observed that *coopetition* is composed of a light mixture of *competition* and a heavy mixture of *collaboration*.

## 6. Comments on the Model's Five Operating Sales Forces

- a. **Property-Level Sales Force** – This sales force is traditionally housed on-property. In the case of this recalibrated hotel B2B sales model, only larger properties, generally 300 rooms or larger and capable of hosting organizational B2B (Business-to-Business) group and conference meetings retain an on-property sales force. Additionally, this sales force has dropped its traditional role of hunting new business and is now primarily tasked with writing short-term meeting contracts with group business that was identified by other sales forces within the Figure 1's sales system. Thus, the property-level sales force could be considered farmers versus hunters. The term for serving customers identified elsewhere is, *Inbound* (farmers) versus *Outbound* (hunters). Also, property-level sales forces serve as a referential anchor in Figure 1's model; salesforces existing near the beginning of the upward sloping arrows are termed, *Below the Property*. Similarly, sales forces existing higher on the sloping line of arrows is termed, *Above the Property*.
- b. **Below the Property Sales Force** – There is one such sales force, below the property, termed a *Regional-Level Group Inbound Sales Center*. In the Figure 1 model, there are about 12 centers located throughout the United States equipped to handle both US domestic and international B2B inquiries. These centers are a gateway and switching portal. All digital inquires seeking group business – and other hotel services such as business travel or long-term relocation stays with the hotel corporation – are first routed to (flagged as *deployed* or *undeployed* meaning having or not having a prior affiliation with the corporate hotel B2B sales system. Then these inquiries are either engaged in a selling process by inbound sales people if they are small

meetings and also *undeployed* or sent to the property-level sales forces if they are medium to large and deployed accounts (currently affiliated with the hotel corporation).

**Notes:** (1) Here it is important to note that this single gateway solves a major problem experienced by other hotel chains without the sophistication of Figure 1's sales organization – the hotel corporation speaks to the target market with one voice. For example, in the past a chain of 15 group and meeting hotels would have property-level sales forces each of which might be contacting the same target market. The Figure 1 model has primarily eliminated this problem. (2) Also, it is important to note that today there are meeting planner/hotel vendor matching Internet platforms – similar to an online dating service. Meeting planners submit RFPs (requests for proposals) to reach out to potential hotel vendors. The largest in the world is *Cvent* and has become a *go-to* utility for meeting planners. Surprisingly, most online B2B inquiries go through a *Cvent* or similar platform while B2C (business to consumer and individual travelers) use either *OTAs* (Online travel Agencies such as *Expedia*) or book directly through the hotel corporation's direct website or 800 number.

c. **Above the Property Sales Forces** – Figure 1 describes three:

- 1) *Area Sales Force*. An *MSA* (Metropolitan Statistical Area) is a US Government unit to designate population and economic clusters in the United States. There are about 383 MSAs in the US; in order, the largest four are: New York, Los Angeles, Chicago, and Dallas. Within these MSAs, the large corporate hotel companies have many hotels – usually carrying several brand flags (*Marriott International* has 30 separate brands) and structured in multiple categories and tiers ranging from lower level, *Select* to top level, *Luxury*. Essentially, the *Area Sales Forces* are the *hunters* – they are outbound salespeople meaning that they look for potential business within their MSAs. This sales force is responsible for obtaining B2B customers from within their MSAs and generally limited to B2B customers with \$0 to \$5 million forecast spend (group business and other ancillary business). This sales force is virtual and mobile and might only temporarily share office space in one of the major hotels in the MSA cluster. As with Regional Group Sales Centers, business obtained by Area Sales Force is actually serviced (short-term meeting contracts prepared) by the Property-Level Sales Force either in the Area MSA or referred to another MSA Area Sales Force depending on customer needs and specifications. It is important to know that the *Area Sales Force* – locating and deploying customer business in the \$0 to \$5 million range – is a first step in the development of these smaller target market accounts to develop, evolve and advance them toward larger strategic accounts handled by the next two sales forces.
- 2) *Country-Level Account Managers*. In reality, this is not a sales force – it is a team which manages key customer accounts at the national or limited multi-national level. They are generally limited to customer accounts with approximately, \$5 million to \$15 million total spend. Once customers enter into this affiliated or *deployed* status with the corporate hotel system, any unit or division from this customer desiring hotel services can either work with their account managers or to simply send requests through *Cvent* or other similar platforms. Again, all such requests, generally flow back to the switching *Regional Group Sales* offices where they are identified and then they redistributed to appropriate (defined by the customer specifications) *Property-Level Sales Forces*.
- 3) *Global-Level Account Managers (GAM)*. These are similar in operation to *Country-Level Account Managers* differing in total B2B spend (here: \$15 million and above). Also, they are global (located in almost all major countries) versus national or limited multi-national in geographic scope. For example, if *Hilton Worldwide* had a large global account such as *Siemens Corporation*, Hilton would have globally dispersed teams to serve globally dispersed Siemens divisions and units. Again, all business inquiries from this account would first flow through the *Regional Group Sales* offices and be redirected to the appropriate *Property-Level Sales Force* in whatever geographic area requested by the customer. Again, single contact between buyer and seller is preserved.

The purpose of the integrated corporate Hotel B2B sales system is to have each target market connected with one voice from the hotel corporation's systemized sales organization. Further, this systematized approach instills

confidence, reliability, and certainty within the minds of B2B buyers. And, certainty – especially in the variable and intangible service industry – is key in acquiring and keeping B2B buyers.

## CONCLUSION

This paper attempted to answer the research question “What is the state of the art of B2B Hotel sales structure and organizational practices? How can we design a descriptive model?” A literature review was followed by a qualitative case study collecting data by interviewing purposefully selected participants with extensive experience with B2B collaborative relational exchange, in the US hotel ecological community. The findings indicate that hotel organizations compete in different modes in the value chain in the contest for market share, while networked webs dominate the other hotel corporations and independent freestanding hotels. Thus, they appear to channel H. G. Wells, (1946) “...The bigger aggregations...eliminate the smaller...eliminating species...”

## Managerial implications

In a world of uncertainty and change, sustainable organizations must generally choose between: (1) Systemic innovation where the firm proactively and dynamically reorganizes both its internal and networked capabilities and activities and (2) Autonomous market innovation where capability and activity standards arise and mesh – statically available for all market players. Management innovates in the first case above and buffers uncertainty attempting to control and limit the effect of change on its internal and external structure of specialized competitive assets. Today, in the hotel business, change is severe and disruptive. The major US based hotel corporations are proactively responding, and pioneering go-to-market systems as illustrated by the hotel B2B sales model illustrated and discussed above. The rapid development of these top-tiered, resource and capability rich companies are, frankly, relegating the remainder of the hotel company players to second, third, and worse, irrelevancy.

Generally, a gap seems to exist between leadership and innovation. Aspiring company executives envision a new and needed future but, often fall short in execution. Simple quick-fix organizational structure and process changes are not the complete solution. Changing the company culture is essential. Leaders must walk-the talk by actively encouraging and protecting innovation. Then, they must spend time actively managing and driving it. The top-tiered US based hotel companies discussed above appear to both effectively plan for and to continuously implement innovation.

Managerial implications for top-tiered companies seem to be: Continue embracing change, plan to take strategic risk aimed at innovation and, then, through combined structural and cultural means, to execute these innovation plans. Managerial implications for the remaining hotel firms is to recognize the reality of marketplace competitive positions – sub-positions labeled, market leaders, followers, challengers and nichers – locate their respective place within each sub-position, and to learn from the boldness of market leaders to advance their position within each sub-position. Perhaps some of these non-market leaders will one-day supplant the top-tiered firms. However, in the short-run, it appears that the competitive positioning order is in the process of freezing.

## Contribution and recommendations for future research

The study adds to our knowledge and understanding of state of the art of B2B Hotel sales/marketing practices, while offering a descriptive model. The concept *coopetition*, however needs further exploration.

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# ANALYSIS OF POLICE-PUBLIC-PARTNERSHIP FOR CRIME PREVENTION IN *ETHEKWINI* METROPOLITAN AREA, KWAZULU-NATAL

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## ABSTRACT

*This paper explores the nexus between high rate of crime and poor public police relationships in eThekwini metropolitan policing area of KwaZulu-Natal (South Africa). The problem related to crime and criminality in Durban Central Policing Area (DCPA) is of such an extent, that the South African Police Service (SAPS) members alone are no longer able to prevent crime in isolation without participation of the residents. Thus, the necessity for Police-Public Partnership [PPP] However, not all SAPS members within the DCPA have an above average knowledge on the role of the public in the prevention of crime. This leads to the parties in question (i.e. the police and the public) not being willing to share information on how crime can be controlled. This paper adopted quantitative research method with questionnaire and literature study (a Five Point Likert Scale with options like: Strongly Agree, agree, no comment, strongly disagree and disagree) consisting of structured questionnaire based on the functions and processes of PPP were administered. Questionnaires were put forward to the SAPS officials and representatives of the community policing structures, as data collection method. Recommendations were made from the research findings.*

**Keywords:** Crime prevention, eThekwini Metropolitan Area, Durban Central Policing Area, Police Public Partnership, Kwa-Zulu Natal.

## INTRODUCTION

Policing principles are embodied in a closely integrated structure through police-public partnership (hereinafter called PPP). The active partners, namely the police, are expected to create an environment where the passive partners, the community, can become involved in combating the crime problem, Durban central policing area (hereinafter called DCPA) is no different (Lyceum, 2003:67). The researchers in this paper strongly contend that, PPP to crime prevention initiatives should be a “social” matter rather than a “security” issue. Smit and Schnetler (2004:80) state that nowadays, the approach is that crime prevention is the joint responsibility of all government departments, Non-Governmental Organisations (NGOs), community-based organisations (CBOs) and individual members of the community (multi-disciplinary responsibility). The community, as a passive partner, has a duty to help and support the active partner in this regard. In definition, partnership in policing implies assistance from the community to the police and vice versa in keeping order (Mayet, 1976:119). Where a rift exists in this partnership, it will be reflected in the relations between the community and the police, and in the image, one has of the other (Mayet, 1976:1). This may normally lead to mistrust between the police and the community.

Prior to the advent of democracy in South Africa in 1994, the police, was used as instrument of the apartheid government, and responsible for applying discriminatory laws and regulations. In this regard, the role of the police was approximated that of a typical colonial police force. The minority (Whites) regarded the police as the guardians of their interests, while the majority (Africans) saw the same police as an instrument of their oppression (Nel & Bezuidenhout, 1995:25). The concept of community policing came with democratic South Africa and it encompasses the functioning of PPP across South African communities. This concept can be defined as an



interactive process between the police and the community to mutually identify and solve community problems (Marais & Van Rooyen, 1990: np)

The geographical location of the present study was the Durban Central Policing area. The main reason for selecting this location was that *eThekweni* Municipality in DCPA is a massive metropolitan, and the prevalence of crime in the area is extremely high.

The objective of this paper was to identify the role of PPP as a crime prevention strategy in the DCPA. It was an attempt to support the wider SAPS vision and mission of protecting the public from harm and threats from potential perpetrators in accordance with Sections 205(3) of the 1996 Constitution of the Republic of South Africa.

## **BRIEF LITERATURE REVIEW ON POLICE- PUBLIC PARTNERSHIP**

### **The purpose of police-public partnership**

In any society, including South Africa, it is evident that the police cannot have stations in all sections of the communities. It is for this reason that the South African Police Service has considered, as one of its strategies, to partner with communities in the effort to combating crime. Crawford (1997:25) states that crime problems can be addressed effectively by forming partnerships with groups, individuals, organisations and other government agencies within communities. Roman, Moore, Jenkins and Small (2002:11), as quoted by Mabunda (2014:29), hold a similar view, that crime can only be reduced when citizens, police and other organisations work together in partnership. Crime prevention effort requires commitment from all role players to allow such a partnership to succeed. From the literature available, the researchers herein noted, that currently in South Africa, the rate of crime is alarming, which seems unlikely to abate within the near future without police-public partnerships in crime prevention. Needless, to say that in South Africa of nowadays, private security has become one of the most profitable industries, employing well over 450 000 people (Brown, 2007:np).

Many suburban South Africans live in jail-like homes guarded by vicious dogs, razor wire, and armed security guards summoned by panic buttons. Region-specific and demographically representative monitoring of crime only began after the democratically elected government came to power in 1994 (Private Security Industry Regulatory Authority [PSIRA] 2015:np). The researchers believe police alone cannot attend to all criminal incidents because of the scarcity of resources, funds and human power. Therefore, the public needs to be brought on board as a means of easing the level of crime in the different precinct of the country. This is further articulated by the SAPS's provincial spokesman, Major Thulani Zwane, who points out that:

*Since the law enforcement agency engaged members of the public, the war against crime had been won in many parts of the province. Through such initiatives, the public tend to work mutually with police to curb crime. Through crime awareness campaigns, regular community meetings and CPF meetings, we have many incidents wherein community have alerted police on criminal activities and the finding or apprehension of the criminals. The relationship between KZN police and members of the public was bearing fruit. However, some members of the public were still shielding relatives from arrest, he said.*  
(Centre for African Journalists [CAJ] News, 2015:np).

## **RESEARCH METHODOLOGY**

The researchers followed quantitative research approach in this study. Questionnaire was used as a specific survey technique to collect data. A detailed description of both members of the SAPS and the public in crime reduction was given. This study was confined to the DCPA, focusing on Durban Central Police Station. The structures in PPP within the area of this study were considered. This formed the basis of the research sample. The target population for this study were the SAPS Station Commander, Crime Prevention Commander, Community Service Commander, Community Policing officer, Crime Prevention officer and members of the community policing structure and

community members within DCPA. The researchers purposively selected the police station situated at DCPA. The selected police station had a total of 200 officials. For the purposes of this study, the sample of 80 respondents across board were considered adequate distribution of the selected population. This sample size was adequate to measure the responses of the respondents, thereby attempting to ensure that all sub-sections of the topic under investigation were covered. The sample in question included the following role players: Station Commander (1), Crime Prevention Commander (1), Community Service Commander (1), Community policing officers (8), Crime prevention officers (9) and members of community policing structures and managers (20), and community members (40). The sampling is the technique by which a sample is drawn from the population (Singleton, Straits & McAllister, 1988:153). The researchers selected a sample of 20 SAPS officials which is sample A, sample B were 20 members of community policing structures, and Sample C were 40 community members; this procedure is supported by (Blaikie, 2003:161). The simple random sampling technique was also used to select the required number of respondents from sample B and Sample C. The sampling approach involves the selection of people, or events, literally “at random”. Behind the use of random sampling lies the assumption that, if there are a sufficiently large number of samples selected, and if their selection has genuinely been “at random”, it is likely that it will be representative of the entire sample.

## **DATA PRESENTATION AND FINDINGS**

### **Understanding police public partnership**

For ease of understanding and appropriate conclusions, the findings represent the percentages according to the number of respondents in a question. 40 % of non-SAPS respondents confirm (Strongly Agree) to the understanding of PPP. In the researchers’ opinion, the public tends to claim to understand concepts. The SAPS members also agree 32.5% and 27.5% strongly agree to understanding the relation thereof. It is statistically evident that the respondents, basically 100% of the respondents, agree to be knowledgeable about PPP.

The researchers believe understanding the concept does not imply that PPP is effective as it may further be researched as to what exactly the public understands about the concept. Understanding the concept and putting the concept to function optimally remains two different phases as far as PPP is concerned. The researchers’ criticism stems from the high rate of crime in the area of study, irrespective of the fact that the respondents have displayed a sense of understanding of the concept. On this basis, an important question may be to ask if both parties (police and community), understand their role when engaging each other. This is a question which remains to be effectively answered in the next paragraph.

### **Understanding the role of the police on Police-Public Partnership initiative**

Most of public respondents (47.5%) agreed with the question that they understand their role on PPP initiative. The same consensus was reached with the SAPS officials sharing the same views with public members (47.5%). Only (3.75%) of the respondents were uncertain about this. Furthermore, (1.25%) disagreed with this statement. From the presented statistics it can be deduced that both parties (police and public) are aware of their roles in this partnership in the DCPA.

Despite the majority (95%) of respondents claiming to be understanding the role of the police on Police-Public Partnership initiative, the disagreement indications shown by the minority on this question (5%) cannot be ignored. It is obvious that understanding what the role should be, is not the same as playing the role. It means; educational awareness programmes should be introduced to address this much-needed initiative, coupled with understanding their [police] operational roles and playing the role as it ought to be played to have positive results. The level of crime in the area can be attributed to lack of speedy response (responding to the reported crimes and finalisation of cases) and the way the police and the public work collaboratively for crime prevention initiatives and how they engage with each other (police-public) to address crime in *eThekweni* Metropolitan area, due to high prevalence of crimes.

The following section gives clarity on the challenges which existed in the police -public partnership in the geographical area of this study.

## **The effectiveness of Police-Public Partnership operations in Durban Central Policing Area**

Forty percent of public respondents strongly agreed with the effectiveness of the PPP, this can be compared with fifty of the SAPS respondents who also strongly agreed with this statement and 8.75% of these respondents showed uncertainty in this regard; the other 1.25% of these respondents disagreed with this statement.

With the results above, it does appear to indicate that the issue of trust remains the primary challenge faced by the Durban Central Police Station and the people represented at PPP. Of importance is that the functions of the PPP or its focus might have been directed to petty crimes (e.g. pickpocketing) happening within the city other than the rated crimes as indicated in the statistics.

## **Relevant stakeholders are forming part of Police-Public Partnership structures in the area**

Public respondents, about forty-two per cent, believed that all relevant stakeholders form part of the PPP structures in the area, while about forty-eight per cent of SAPS respondents agreed that relevant stakeholders formed part of the PPP in the area. However, about eight per cent of the respondents were uncertain about this statement; this reflects six per cent of the public police and two per cent of SAPS members. To this course, only one per cent of the public respondents strongly disagreed with this statement (public member). It is important to note that forming part of the PPP structures by relevant structures in the area does not translate to low crime rates. The respondents expressed a positive relationship with the available relevant stakeholders in the area for crime prevention. The effectiveness of the work performed by these relevant stakeholders remains fruitless at the current phase (by the time of conducting this study).

## **The relations between the police and the public reduces crime in the DCPA**

The indications from the study do not correspond that the PPP reduces crime in DCPA. There are high rates of various crimes in the area, to clearly prove that the relationship between these respondents (police-public) is only effective on paper. It shows that these respondents had very little or no knowledge of how to make this relationship effective for crime prevention and the strengthening of the PPP initiatives. With the researchers' observation it cannot be said that this relationship is effective for crime prevention. These parties should understand their functional roles in crime prevention.

# **CONCLUSION AND RECOMMENDATIONS**

According to majority of the respondents, it is statistically evident that both public and SAPS members tend to believe that they are aware of PPP around the DCPA. The crime rates in the DCPA is high, indicating unfriendly relationship between the local SAPS officials and members of the public. It is also proven that most of the respondents are aware of the existence of community policing structures that exist within the area, with only about twenty per cent of the respondents who disagreed with this statement. Existence of such structures may not be an indication of being effective, unless they are well managed and supervised by individuals who are committed. Most of public and SAPS respondents validates that, there are awareness campaigns within the area.

From the evidence provided by this study, it is not out of place to reach conclusions that, crime in the DCPA is of an alarming state because of the poor relations between the police and the public. Several factors prove to be of minimal concern surrounding the PPP initiatives around the DCPA. It is evident that PPP was regarded as a flexible tool to determine and address community problems and to mobilise communities. In this regard, about eighty per cent of the respondents believe that PPP was only a practical form of community policing. The central premise of community policing is that the level of community participation in enhancing safety and social order, and in solving community-related problems including, crime. It should be elevated, as the police alone cannot carry out

this task exceptionally on their own. To encourage the public to share responsibility for enhancing the communities' quality of life and thus actively supporting the police in efforts to control and prevent crime, the police must build trust and develop a partnership between themselves and the public. This partnership needs to be characterised by mutual responsiveness and an equal footing for both partners.

To achieve such a partnership, the police must be better integrated into the community and strengthen their legitimacy (in the community) through policing by consent and improving their services to the public. Thus, they should be visible and accessible to the public; know and be known by the public; respond to the communities' needs; listen to the communities' concerns; engage and mobilise the communities and be accountable for their activities. Visibility and accessibility require that police officers be easily approachable by members of the community through the creation of a visible and non-threatening presence within the neighbourhood. Daily personal contacts will also familiarise the communities with "their" police officers.

There should be, collaboration with other stakeholders, thus develop "social cohesion" of the neighbourhoods to which they are assigned. Vulnerable residents and groups, troublemakers and criminals, crime generators (alcohol selling outlets - bars) and hot spots, community leaders, types of businesses in the area and available social facilities should be identified and closely monitored. The requirement for community consultation is based on the recognition; hence, a passive police organisation, which unilaterally decides what the public needs, will not be successful.

In order to improve the PPP in the DCPA, there is need for consultations among the various stakeholders, engaging and mobilising the community in the identification of community problems, analysing the underlying causes of the problems. Through consultation, the police demonstrate that the community's concerns, values and advice will be considered. In exchange, the community will provide useful information, resources and moral support for police activities.

From the results of this study, it can be concluded that police officers and public in the DCPA are knowledgeable in terms of all regulations, policies and procedures that govern partnerships in policing. But there seems to be a lack of communication with regards to execution of certain procedures. There seems to be lack of commitment from several stakeholders in order to sustain the initiative or reduction in crime rates. Results further show that more than seventy five percent of the youth would not participate in the policing initiative, unlike the majority of adults who are fully committed in getting rid of crime in the area.

This strategy of PPP clearly has a future as a law enforcement strategy in South Africa, the potential of the strategy has not been utilised. On-going research on the concept and effectiveness of PPP in DCPA is not only essential, but even in the other areas of policing, as safety is key to the welfare and economic development of any nation.

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# THE INFLUENCERS OF BRAND AVOIDANCE BEHAVIOUR IN THE PREPARED MEATS CATEGORY: A CASE OF GENERATION Y

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## ABSTRACT

*Previous studies have confirmed that literature reveals that there has been a lot of emphasis on forming strong consumer-brand relation and developing brand loyalty however, interest in negative brand relationships has been largely unexplored. Paying attention only on successes, organizations will not fully understand what influences failure. To scrutinize the issue at hand, this research explored brand avoidance influencers amongst today's Generation Y consumers. A quantitative survey was conducted on 355 respondents. The results suggests that Generation Y consumers avoid certain brands owed to four avoidance types namely experience avoidance, identity avoidance, moral and lastly advertising avoidance. Findings on the following consistent with previous researches. The results however, did not appear to support experience avoidance only.*

**Keywords:** Brand avoidance, advertising avoidance, perceived satisfaction, brand loyalty, ease of use, generation Y, consumers.

## INTRODUCTION

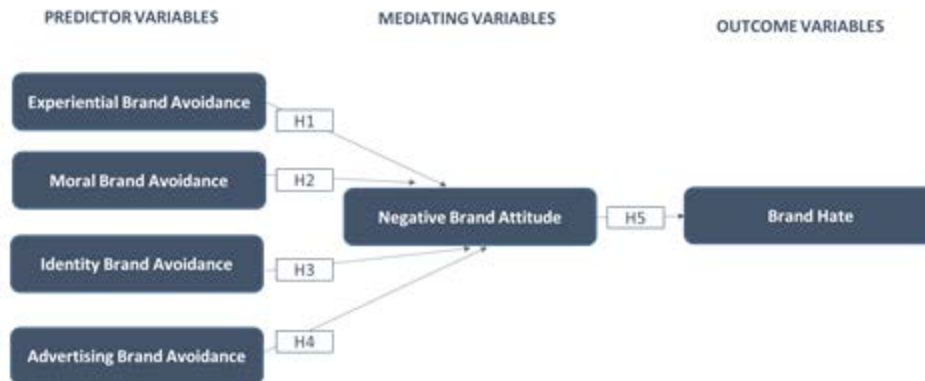
Holt (2002, p. 70) argues that brands are 'under attack by an emerging countercultural movement'. Holt (2002, p.70) associates 'The People versus The Corporate Cool Machine' as one of the political movements prioritised throughout the twentieth century. Opposing against brands is no longer an anti-establishment symbol of youth but is a fully fledged social movement (Economist, 2001 cited in Holt, 2002). Holt (2002) adds that consumers are progressively but inevitably wearing away marketers' control through micro-emancipatory practises. Likewise, Maffesoli, 1996 cited in Holt (2002) agrees that consumers are breaking down marketers' domination by looking for social spaces where they generate their own cultures, and avoiding those imposed to them by the market. Lee (2008) maintains that the field of anti-consumption and a specific subject of brand avoidance is progressively becoming interesting to relevant scholars, managers and consumers. Despite the growing interest, existing literature still lacks an all-inclusive understanding of anti-consumption and its related topics Lee (2008). Lee et al. (2009) asserts that there is lack of research carried out on consumers' negative brand emotions. For the reason that this topic is overlooked and not studied in depth, (Lee et al., 2009b and Knittel et al., 2016), further research is acquired in this regard. The concept of brand avoidance was coined by Oliva, Oliver, and MacMillen in 1992 in an attempt to differentiate between brand avoidance and brand loyalty. They define brand avoidance as the anti-thesis, which means the opposite of brand loyalty (Oliva et al., 1992). The brand avoidance concept was not suitably defined until it was revised by Lee (2008) where he formally defined the concept (Kavaliauskė and Simanavičiūtė, 2015; Khan and 2014). Lee (2008 p. 225) defines brand avoidance as the mindful, purposeful and active rejection of a brand that consumers can afford owing to the negative meaning associated with that brand. Oliva et al. (1992) interpreted that satisfaction leads brand loyalty, whereas dissatisfaction leads to brand avoidance and the latter ultimately causes brand switching. In light of the above, this study addresses influencers of brand avoidance behaviours of the Generation Y segment following brand failure in the prepared meats category.

## PROBLEM STATEMENT

Through literature, it has been noted that there has been a lot of emphasis on forming strong consumer-brand relations and developing brand loyalty however, interest in negative brand relationships has been largely unexplored. By only analysing influencers contributing to business success, businesses might never understand what causes failures. Likewise, Dalli, Romani and Gistri (2006) argue that for organisations to better understand and explain consumers' purchase and consumption behaviours, it imperative to analyse both positive and negative aspects. The negative perspective is rarely researched, for example, anti-consumption, brand hate and brand avoidance (Khan and Lee, 2014; Lee, Motion and Conroy 2009 (a); Lee, Conroy and Motion 2009 (b) Similarly, Dalli, Romani and Gistri (2006) notes that negative brand emotions have not been dedicated the same determination as has been dedicated to the studies of positive attitudes. Pavelka (2016) interestingly argues that it's too naïve to assume that it is continuously 'love, peace and harmony' amongst consumers and brands however, research has determined that there is a substantial number of negative-consumer relationships compared to positive relationships. In the last decade, interest in the topic of anti-consumption and brand avoidance have been increasing, to be specific, Lee et al., 2009a). Nikolov and Pehrsson (2016) discusses that a minimal portion of research assesses consumers' decisions to avoid certain brands. With the reference to the above, this study investigates consumer reactions to negative product performance as well as false brand promises in the prepared meats industry. This study will also look at how the negative involvement will affect consumption of the organisation's products. The research problem at hand indicates consumers' decision to avoid brands' certain goods and services due to undesirable implications. Abid and Khattak (2017) note that the emerging concept of brand avoidance is prevailing and is getting the attention of consumers who are beginning to refuse certain product due to their undesired implications.

## CONCEPTUAL MODEL

The conceptual framework for this study was derived from Lee, Motion and Conroy (2008) known as the Conceptual framework of Brand Avoidance, which is used to provide insights into why brands are avoided and give suggestions on how brand avoidance can be mitigated. The conceptual model for this study consists of predictor variables (experiential brand avoidance, moral brand avoidance, identity brand avoidance and advertising brand avoidance), mediator variable (negative brand attitude) and lastly, the outcome that this study aims to analyse is the influence of brand avoidance behaviours towards brand hate in the prepared meats category. The study takes into account the effect of the mediator variable negative brand attitude on brand hate. The conceptual model used for this study encompasses six variables and is demonstrated in figure 2 below.



**Figure 1: Proposed Brand Avoidance Conceptual Model.**



## LITERATURE REVIEW

The context for this study are the Generation Y students in South African, Johannesburg universities. Several segments of the population were considered before finally deciding on this type of consumer. Generation Y or simply Gen Yers or millennials are a subset of a population that were born between 1981 and 2001 (Brown, 2018). Dates vary according to different sources. Goeos-Malka (2012) attests that Gen Yers are the largest population group in comparison to other generations and based on their group size and through globalised networks connecting people, this group has the competences to mobilise mass movements. Brown (2018) refers to Posterscope South Africa, which accesses various locations and geographic data and amongst others. Posterscope listens and tracks conversations with specific hashtags or categories of importance on various social media platforms. Brown (2018) reports Johannesburg as one of the top fifteen millennial hotspot areas in Gauteng and lists Wits University as one of the noteworthy hotspot locations. Moreover, Brown (2018) mentions a hashtag #sorry not sorry which demonstrates a reasonable amount of honesty amongst Gen Yers to express themselves without restrictions and judgement, but importantly, 'still call out bad behaviour of others'. With that said, Generation Y from Wits University are an interesting sample to gather opinions from. Brown (2018) adds that this generation is connected and responsive to their environments and are authentic about who they are and about how they express themselves. This study is interested in analysing how this type of consumer will engage in brand avoidance particularly to a product which is considered to be containing negative brand connotations.

## METHODOLOGY

Hauge, Hauge and Morgan (2013) state that qualitative research emphasises on understanding rather than measurement. For this study, a quantitative research method will be employed for reliability and validity reasons. Although this study is quantitative in nature, a qualitative sampling method termed convenient or accidental sampling technique will be adopted as it is based on candidates that are readily available at the university. The target population for this research are registered university students in Johannesburg, South Africa, more specifically University of the Witwatersrand students. The Wits University student community is estimated to have 37 374 students. For the population of this size, the Raosoft Sample Size Calculator (2019) recommends a sample size of 377. A self-administered questionnaire with close ended questions was the instrument adopted to collect data. Structured or close ended questions stipulate permitted responses allowing the respondents to respond by selecting one of the answers or options provided (Cant-Nel et al., 2012). For self-administered questionnaires, respondents are left on their own to complete the questionnaires without the help of a computer or an interviewer (Cant-Nel et al., 2012). Respondents will be asked to indicate their degree of agreement or disagreement with the phrases on a systematic agree-disagree scale. For this research, a six-point Likert scale, assigning numbers to characteristics will be used.

## DATA ANALYSIS AND RESULTS

Prior to testing the hypotheses, confirmatory factor analysis (CFA) was performed to examine reliability, convergent and discriminant validity of the multi-item construct measures using AMOS 24.0 Overall, acceptable model fit is indicated by goodness-of-fit index (GFI)

incremental index of fit (IFI); Tucker Lewis Index (TLI) and comparative fit index (CFI) values

Recommended statistics for the final overall model assessment show acceptable fit of the measurement model to the data:  $\chi^2/(df) = 2.984$ , GFI = 0.801; IFI = 0.843; TLI = 0.823; CFI = 0.842; RMSEA = 0.075. Loadings of individual items on their respective constructs are shown in Table 1, while the scale construct correlations are presented in Table 3.

$\geq 0.80$ ; root mean square multiple correlation  $\geq 0.90$ .

**Table 1: Measurement accuracy assessment and descriptive.**

Research Constructs		Descriptive Statistics		Cronbach's Test		Composite Reliability	AVE Values	Factor Loadings Estimates
		Mean Value	Standard Deviation	Item Total Correlation	Cronbach Alpha Value			
CE	CE1	4,95	1,368	0,560	0,790	0,770	0,4	0,6
	CE2	5,21	1,151	0,668				0,666
	CE3	5,01	1,099	0,549				0,583
	CE4	4,61	1,356	0,548				0,675
	CE5	4,74	1,321	0,541				0,632
MI	MI1	4,19	1,359	0,596	0,796	0,770	0,46	0,755
	MI2	4,34	1,439	0,438				
	MI3	5,28	1,192	0,409				0,593
	MI4	4,17	1,413	0,758				0,756
	MI5	4,12	1,453	0,704				0,6
ID	ID1	3,67	1,440	0,625	0,837	0,840	0,44	0,673
	ID2	3,77	1,503	0,654				0,694
	ID3	3,27	1,561	0,699				0,729
	ID4	3,59	1,453	0,546				0,702
	ID5	3,62	1,482	0,743				0,783
	ID6	4,14	1,510	0,426				0,495
	ID7	2,52	1,525	0,444				0,501
ADV	ADV1	3,26	1,394	0,472	0,743	0,800	0,5	0,667
	ADV2	2,56	1,388	0,553				0,809
	ADV3	2,61	1,348	0,611				0,771
	ADV4	3,96	1,559	0,405				
	ADV5	3,05	1,475	0,515				0,57
	ADV6	4,03	1,509	0,353				
ATT	ATT1	4,07	1,349	0,644	0,843	0,840	0,64	0,695
	ATT2	3,79	1,363	0,743				0,846
	ATT3	3,94	1,414	0,741				0,852
BH	BH1	3,93	1,481	0,539	0,894	0,900	0,56	0,633
	BH2	3,48	1,523	0,710				0,766
	BH3	3,09	1,496	0,801				0,821
	BH4	3,44	1,579	0,799				0,804
	BH5	3,43	1,473	0,792				0,831
	BH6	3,57	1,614	0,611				0,681
	BH7	2,74	1,545	0,618				0,664

As recommended by Anderson and Gerbing (1988) and Hair, Babin, Anderson and Tatham (2010), individual item loadings should be above 0.5. From the results presented in Table 1, all the remaining item loadings for the research constructs are above 0.51, therefore, proving acceptable individual item reliabilities as more than 50 percent of each item's variance is shared with its respective construct. Using a formulae proposed by Fornell and Lacker (1981), the composite reliabilities (CR) and average variance extracted (AVE) for each variable were computed. The composite reliabilities (CR) are all above the recommended value of 0.7 suggested by Hulland (1999); thus, indicating satisfactory internal uniformity and dependability of the respective measures. All average variance explained (AVE) values are marginally/above 0.5, thus tolerable according to the literature (Fraering & Minor, 2006).

**Table 2: Inter-Construct Correlation Matrix.**

Research Construct	CE	MI	ID	ADV	ATT	BH
CE	1					
MI	.586**	1				
ID	.290**	.509**	1			
ADV	.126*	.285**	.620**	1		
ATT	.404**	.505**	.592**	.535**	1	1
BH	.190**	.453**	.617**	.565**	.624**	.624**

The correlation matrix was an approach used to test for discriminant validity. Bryman and Bell, 2007 cited in Chinomona (2015) recommends a threshold of less (<) than or equal to 0.6000 for discriminant validity. To validate discriminant validity of the constructs involves validating that no two constructs in the study are similar to each other. An assessment of the correlations amongst latent constructs was done and the value of less than or equal to 0.6 was determined on all constructs as follows; CE and MI = 0.586, CE and ID = 0.290; CE and ADV = 0.126; CE and ATT = 0.404; CE and BH = .190. Chinomona (2015) adds that the item-to-total correlations are usually used to determine convergent validity. The value of less than 0.6. indicates the existence of discriminant validity (Chinomona, Mahlangu and Poee, 2013). Table 2 indicates that majority of the values were above 0.5 which is the acceptable threshold.

## Structural Equation Modelling

Structural Equation Modelling (SEM) was used to analyse the data captured. SEM can be defined as a method of multivariate statistical analysis, with the ability to measure the underlying covert constructs identified through factor analysis and evaluating paths of hypothesised relationships between constructs (Nusair & Hua, 2010). In a nutshell, Structural Equation Modelling features a combination of factor and regression analysis that uses continuous and discrete predictors and outcomes in order to measure the relationships among latent variables (Chinomona, 2016). This study used structural equation modelling (SEM) to approximate the causal relationship among the constructs based on the conceptual model in Figure 1. The maximum likelihood estimation (MLE) method was used because it has desirable asymptotic properties (e.g., minimum variance and unbiasedness) and is scale-free. The results are reported in Table 1. The model is acceptable in terms of overall GIF. Acceptable model fit are indicated by  $\chi^2$  (df) values <3, GFI and AGFI values  $\geq 0.80$ ; RMSEA values  $\leq 0.080$ ; IFI and CFI values  $\geq 0.90$ . Results of this study indicate that,  $\chi^2$  (df) = 2.984; GFI (0.801); IFI (0.843), TLI (0.823), CFI (0.842) and RMSEA (0.075), therefore, achieved the suggested thresholds (Hair et al., 2010). This suggests that the model converged well and could be a plausible representation of underlying empirical data structures collected in South Africa.

**Table 3: Result of path model analysis.**

Proposed Hypothesis Relationship	Hypothesis	Path Coefficient	Significance
CE → ATT	H <sub>1</sub>	0,222	Insignificant
MI → ATT	H <sub>2</sub>	0,184***	Significant at 0.01 – indicating a 99% confidence.
ID → ATT	H <sub>3</sub>	0,611***	Significant at 0.01 – indicating a 99% confidence.
ADV → ATT	H <sub>4</sub>	0,696****	Significant at 0.01 – indicating a 99% confidence.
ATT → BH	H <sub>5</sub>	0,967***	Significant at 0.01 – indicating a 99% confidence.

## DISCUSSION ON RESULTS

Empirical findings provide support for all three-theoretical models and embrace The Attachment-Aversion of customer-brand relationships, the Theory of Exit, Voice and Loyalty and the Disidentification Theory. The AA model holds true as it proves that individuals will feel attached to a brand at some point (brand attachment), however, when a brand disappoints, individuals will become antagonistic to the brand. The results in this study support the Theory of Exit, Voice and Loyalty in a sense that consumers will exit the brand-consumer relationship if the brand fails to deliver on its brand promise. The results also support that disidentification is not to organizations' advantage and offending organisations need to understand factors that lead to consumers disidentifying with brands. As indicated by Elsbach and Bhattacharya (2001) and Bhattacharya and Elsbach (2002) disidentification can manifest through consumers' sense of separation with the brand and through individuals' cognitive separation between their own identities and that of an organisation.

Five hypotheses were assumed and to test the said proposed hypotheses, data was collected from The University of the Witwatersrand, Generation Y students. Empirical results supported all postulated hypotheses which means that all the findings were consistent with the evidence from previous studies.

## CONCLUSION AND MANAGERIAL IMPLICATIONS

This research presents a number of practical managerial implications for manufacturers of prepared meats and particularly all organisations that have been implicated in product failures. The results can offer guidelines or insights to offending organisations who have failed consumers where safety is concerned and have caused consumers to avoid their brands. The results will assist organisations to better understand factors attributing to brand avoidance behaviour in order to avoid 'branding crisis' Thompson et al., 2006 cited in Lee (2007), resulting in negative financial equity Lee (2008), reputation crisis and reduced market share Lee (2007) and a lack of consumer trust. The results in this

study support the Theory of Exit, Voice and Loyalty in a sense that consumers will exit the brand-consumer relationship if the brand fails to deliver on its brand promise.

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# **INTERNAL CONTROLS AS FACTORS TOWARDS ACHIEVING A CLEAN AUDIT: THE CASE OF MUNICIPALITIES IN SOUTH AFRICA**

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## **ABSTRACT**

*This paper seeks to provide a light on the effectiveness of internal control practices on audit outcome at municipalities in South Africa. Thus, the Office of the Auditor General as established in terms of section 188 of the Constitution of the Republic of South Africa, 1996 and is required to audit and report on the consolidated financial statements of the municipality and all municipal entities under its sole, while section 122(2) of the Municipal Finance Management Act, 2003 (Act 53 of 2003) require the internal control. In addition to the mandate that the local government has to carry in order to ensure that municipal finances are utilized effectively, efficiently and economically while delivering services. The research design used in this paper was a desktop research. The study-analyzed data through content analysis, therefore the researcher made use of documents, books, journals, internet, official documentations and government reports. The outcome points that achieving a clean audit depend entirely in a manner within which the internal controls are implemented in municipalities. It was observed that internal control system is the driving source behind the success of any municipality in fulfilling its constitutional obligation.*

## **INTRODUCTION**

Public institutions are generally responsible for ensuring the delivery of service or beneficial outcome to the public at large with a social interest rather than drive of profit maximization. However, in the process of achieving desired objectives, they have to face all kinds of probabilities and forces which may be internal or external. The success, therefore, is depending on how far a public institution is able to anticipate and cope with risks. Amongst the several internal control management, internal audit is primarily used as an effective tool to manage operational, financial, legal and regulatory threats. Further, internal audit also facilitates in formulating strategic policies to achieve enterprise goals. The paper initiates its discussion by reviewing related literature on internal control systems and audit systems. Secondly, a conceptualization of internal controls will be discussed. Thirdly, the research methodology used in this paper will be explained briefly. Finally, the paper concludes by presenting some recommendations.

## **LITERATURE REVIEW**

With the continual change of demands from the public and the limited resource at hand. It is clear that the municipalities are compelled to ensure that their finances are in order and every resource within their institution is accounted for in an orderly manner. This in turn will increase level of public satisfaction and the overall performance of the municipality through their existing internal controls systems. Previous research reveal that internal control are the government process and procedure that is been established with the aim of objective achievement. Internal control consists of the organization planning that includes all methods used to safeguard the company assets, to insure the reliability of information, to support the efficiency and effectiveness of operations, and to insure the compliance with rules and regulations (Arens, Elder, and Beasley, 2010, p.13). Young (2009, p.97) virtually have the same view as

Glance (2006, p.116) with more emphasis on the magnitude of the sound internal control to enable an organization to meet goals and maintain financial viability.

Sawalqa, Fawzi, Qtish and Atala (2012, p.37) reveal that, in Brazil, the control and auditing traditions have undergone transformation ever since the re-democratization of 1985 and the new Constitution of 1988, which has put in place the processes for institutional restoration and the strengthening of republican practices. Contrary to international experience, research further discovered that Brazil is characterized by a variety of control institutions, with diverging scope, but which are often overlapping in an inconsistent manner. Research indicated that, part of the underlying struggle between the Brazil control agency and organs of public administration is influenced by the International experience (Sawalqa *et al.* 2012, p.38).

The finding by Sawalqa *et al.* (2012, p.38) also pointed out that, the control systems and auditing activity is still perceived by officials as predominantly based on the standards of strict legality, and there are disagreements about how to define the performance assessment standards in public institutions. On the other hand, Cortesi, Tettamanzi and Corno (2008, p.240) dealt with control matters and moves on to causes and cases of their failures in relation to a sample of Italian companies. This empirical survey highlighted the main limits and areas for improvement in the working of company Internal Control systems and in the objectives of the role of the three main professional bodies currently in charge of it in Italy, which include Internal Auditing, Statutory Auditors and External Auditors. The study revealed that, the Italian situation is very unusual, due to a long tradition: the possibility to choose between different administration and control systems, often with coexisting and overlapping roles, creates problems in terms of responsibility and control.

While in South Africa, the office of the Auditor-General of South Africa (AGSA) facilitates a process of in-year reviews of key controls by public institutions management and oversight structures. The AGSA has developed a tracking process (which incorporates the more commonly known “key control dashboard”) to assist management and oversight structures to closely monitor the effectiveness of their internal controls. AGSA’s emphasis on those controls, which comprise leadership involvement, financial and performance management and governance is to treat them as the key drivers to improve audit outcomes. AGSA further highlight that the senior team members in the office of the Auditor General South Africa, are working throughout the financial year in partnership with auditees to assess, on a quarterly basis, whether auditees are aware of and addressing any deficiencies in these key controls.

The ruling of Changchit, Holsapple and Madden (2001, p.437) found that internal control system issue has been found to be significant to the organization especially in the aspect of assurance of the reliability and accuracy of the financial reports. However, it is a subject that receives too little attention in the management literature. Mckenney (2005, p.81) supported that lack of attention is due, among other things to the general view that the internal control is purely or mainly a financial function to be controlled and managed by those charged with controlling finances.

A further research also come across a piece of information that internal controls systems on its own is not a sufficient mechanism. Similar to South African context, Ho and Hutchinson (2010, p.121) signifies that internal controls and audit cannot be separated from each other, because one does not make sense without the other. The main purpose of internal auditing is to review effectiveness and efficiency of internal control system and to find out whether the system is functioning as projected. Not only does internal audit intend to add value, but it also advance the organizations operations by supporting organizations achieve their goals and objectives through assessing and refining the effectiveness of risk management, skill and governance (Ho and Hutchinson, 2010, p.121).

Carcello, Hermanson and Raghunandan (2005, p.69) contends that internal audit creates organised rules and systematic method to monitor and evaluate the effectiveness of control system, risk management and governance process. Effective internal control system provides realistic assurance that institutional goals and objective will be achieved. The study of Changchit *et al.* (2001, p. 427) further suggest that, the survival of each municipality is tied to the effective implementation, maintenance and monitoring of the internal controls system. In support of that Handbook for Municipal Finance Officers (2006, p.2) and (COSO, 1992) specified the major components of internal control system that the municipality ought to practice in day to day operations. Such components are as follows;

- Nurture a constructive control environment,



- Conduct risk assessment,
- Plan and put into practice control activities in the form of policies and procedures,
- Provide for efficient communication throughout the organisation, and
- Conduct an on-going monitoring of the effectiveness of control-related policies and procedures (COSO, 1992).

In view of the above, the effectiveness of these components in municipalities will not only hold the municipal officials accountable and transparent but also mean that the municipalities will help the municipalities to operate under a proper administration. Effective internal control measures in municipalities will further promote sound relations and sense of corporation between all the municipalities relevant stakeholders and eventually lead to common understanding of the importance of the compliance from both municipal personnel and the community, (in a case of the community is the compliance with the municipalities bylaws), this on the other hand will allow all the community members within the jurisdiction area of their municipalities to be active enough in scanning the environment in their communities and reporting on the matters that are of a serious concern.

## RESEARCH METHODOLOGY

The research methodology used in this paper was a qualitative method. This paper was a desktop research. McNabb (2013, p.127) argue that qualitative researchers recognise that the issue they are studying has many dimensions and layers, and accordingly, they try to portray the issue in its multifaceted form. Qualitative research creates descriptive data and typically no numbers or statistics are made. The research design in this study is phenomenological as the researcher intends to try and understand people's perceptions, feelings as well as understanding of the events and situations. The researcher chose secondary data collector method, simply because it cost less, it saves time and it requires less effort. The paper analyzed data through content analysis, therefore the researcher made use of documents, books, journals, newspapers, internet and reports to analyze data.

## CONCEPTUALIZATION OF INTERNAL CONTROL

According to Hightower (2008, p.140), internal control is a process carried out by those charged with governance, management, and other personnel and designed to provide reasonable assurance about the achievement of the entity's objectives. By the same token COSO (2014), describe internal control as a procedure carried out by an entity's board of directors, management and other personnel, intended to provide reasonable assurance regarding the achievement of objectives in effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations. In addition, Arwinge (2013, p.22) defines internal controls as methods put in place by an institution to ensure the integrity of financial and accounting information. The researcher agrees with the definition of internal control, as indicated by COSO (2014), which regard internal control as an all-inclusive system that is used in the public organizations to execute the fiscal activities in an orderly manner.

## TYPES OF INTERNAL CONTROLS

In line with the changes that has been introduced on the internal controls systems. It is clear that the main purpose of the internal controls is to ensure compliance within the institutions. Nonetheless, internal controls can be identified in two ways. Hightower (2008, p.114) underline that, internal controls can be detective, or preventive by nature. In order to address deficiencies in key controls, one needs to understand the difference between detective and preventive controls. The two types are described as follows:

- **Detective controls** are designed to detect errors or irregularities that may have occurred. According to Hightower (2008, p.144), detective control refers to checks and balances that occur after the transactional event has occurred and is designed to identify an error, omission, misstatements or fraud. Hightower (2008,

p.144 ) further elaborates that general control considered detective in nature include comparing budget to actual results, comparing period-over-periodic results, monitoring performance indicators and following up on unexpected results or unusual items; and

- **Preventive controls** on the other hand, are designed to keep errors or irregularities from occurring in the first place. Hightower (2008, p.144) defines preventive as the control procedure designed within and becoming part of the process. Hightower went on to say that the general control considered preventative in nature, include written policies and procedures, limits to authority, attaching supporting documentations, questioning unusual items and no blank signed forms.

## DEFICIENCIES ON INTERNAL CONTROLS

Graham (2001, p.485) states that no matter how well the internal controls are designed, they can only provide a reasonable assurance that objectives will be achieved. Some limitations are inherent in all internal control systems. These limitations include:

- **Judgment** – the effectiveness of controls will be limited by decisions made with human judgment under pressures to conduct business based on the information available at hand.
- **Breakdowns** – even well designed internal controls can break down. Employees sometimes misunderstand instructions or simply make mistakes. Errors may also result from new technology and the complexity of computerized information systems.
- **Management Override** – high level personnel may be able to override prescribed policies or procedures for personal gains or advantages. This should not be confused with management intervention, which represents management actions to depart from prescribed policies and procedures for legitimate purposes.
- **Collusion** – control system can be circumvented by employee collusion. Individuals acting collectively can alter financial data or other management information in a manner that cannot be identified by control systems (Graham, 2001, p.485).

## FACTORS THAT HAVE INFLUENCE ON INTERNAL CONTROL AND AUDIT OUTCOME

There are number of internal control factors that could influence the audit outcome, whether in a negative or positive manner (Tauringana and Mangena, 2012, p.184). This section presents factors that has an influence on the municipalities in receiving clean audits. Therefore, the following are factors that impact on audit outcome and internal control:

- **Accounting standards** - accounting policy is regarded as an on-going concern by which the International Accounting Standard Board (IASB) and Accounting Standard Board of South Africa (ASBSA) amend and revise standards to provide new guidance of accounting treatments of transactions. This relates to business combinations, consolidated, and separate financial statements, which normally affect the control environment on compliance reporting;
- **Emotional intelligence** - management has many dealings with people in the organisation, especially if the strategy of the organisation changes within the planning and control environment. It is here that emotional intelligence counts to improve performance. According to Puth (2007, p.17) emotional intelligence is based on honing emotional elements, self-regulation, motivation, empathy and social skill. Its goal is to find positive ways to move the organisation forward. The importance of strategic intelligence relates to how organisations

can use information and the processing thereof that indicates how everything is binds together; information to knowledge (Puth, 2007, p.17);

- **Skills development** - South Africa does not have a capacity challenge but rather a challenge to generate additional accounting skill in South Africa (Deloitte, 2013). As the South African economy grows, the skills shortage poses a serious threat. (Deloitte, 2013) indicated that there is a particular need and demand for skilled accounting staff in all sectors and in all sizes and types of organisations. A new professional body for accounting technicians was launched in 2010 to empower the accounting skill shortages in South Africa (Deloitte, 2013). A partnership between the South African Institute of Chartered Accountants (SAICA) and the London-based Association of Accounting Technicians facilitated the launch. The Association of Accounting Technicians South Africa provides a new career path in accountancy to enhance the employees' competency in order to enable them to be effective and productive in their work environment (Deloitte, 2013); and
- **Compliance** - institutions are required to ensure that their overall governance structure is capacitated for practicing good corporate governance. This can only be possible if the internal audit unit is functional. In addition, a risk management strategy must be developed to ensure compliance in the work environment. (Bessis, 2002, p.25) pointed that the starting point for setting a corporate governance culture in an organisation is to have an Enterprise Risk Management Framework (ERM). The ERM framework facilitates the determination of the risk appetite and risk tolerance of the organisation (Bessis, 2002, p.25). Where ERM is practiced, the compliance risk framework should be a sub-framework of the ERM framework. One of the key elements of the relationship between ERM and internal audit is that the ERM process assists with focusing both internal and external audits efforts on high-risk control areas. It is in this light that organisations are encouraged to implement a dashboard, or a compliance checklist (Bessis, 2002, p.26).

## CONCLUSION AND RECOMMENDATIONS

On the basis of the evidences revealed in this paper, achieving a clean audit depend entirely in a manner within which the internal controls are implemented in municipalities. It is clear that internal control system is the driving source behind the success of any municipality. Therefore, the municipalities must strive within its available resources to ensure effective implementation of internal control systems. The paper recommend that (1) municipalities' personnel from the lowest to the highest level, should be encouraged to familiarize themselves with all the institutional policies and procedures on regular basis. The municipality should also hold policy indabas on a quarterly basis whereby changes and amendments made in the municipal policies are communicated. (2) Accounting Officers who in this regard is the Municipal Manger, together with the Executive Mayor and the rest of the senior managers should enforce full implementation of its internal control systems to prevent irregular, fruitless and wasteful expenditure. (3) All members of the audit committee should at least attend a training twice a year at the higher educational institutions to enhance their capacity on internal control in monitoring financial resources of the municipality. This will her the audit committee to be more effective in the implementation of their duties and responsibilities. (4) Risk assessment and financial reporting should be done regularly, for example monthly, quarterly and annually. As implementation of a risk assessment and financial reporting would enable the municipality to develop risk management plans, which would serve as an intervention strategies for any unforeseen circumstances that might occur. (5) The should establish a direct report hotline for the municipality in order to allow the community to report illegal connection of electricity, as this could also help save the municipality a huge amount of money.

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# THE ECONOMIC IMPACT OF POOR WASTE-WATER SERVICES DUE TO URBANISATION: A CASE STUDY OF DIEPSLOOT, SOUTH AFRICA

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## ABSTRACT

*Quality of freshwater in South Africa is deteriorating due to poor wastewater management. More than 65% of South Africans are living in urban areas. This study aimed at assessing the economic impact of the sewer systems spillage. Data were collected in two different methods: Desk-top and fieldwork. Townships were over populated within limited space which resulted in sewer systems overflowing and contaminating surface water. More than 50% of the country's dams are highly contaminated by eutrophication. This costs the country billions of rands to replace and upgrade the sewer system as well as dams.*

**Keywords:** Economic Impact, Waste-water, Urbanisation, Township, Surface water.

## INTRODUCTION AND LITERATURE REVIEW

Water is essential for all living organisms, of which the human body needs about 65% daily. Likewise seventy percent of the world's surface is covered with water; however, only 2.5% of this water is fresh and only 1% is accessible. Although South Africa has access to surface water (77% of total use), groundwater (9% of total use) and recycled water (14% of total use); most of the surface water sources are highly contaminated by cyanobacteria that produce toxins due to poor wastewater management, with 28% of these water sources being reported as hypertrophic, 33% as eutrophic, 37% as mesotrophic and only 3% as oligotrophic (Matthews & Bernard, 2015). Wild (2018) reported that two in five dams in South Africa are at high risk for toxic algae, and more than 50% of the largest dams in South Africa are not safe for swimming. South Africa is therefore classified as a water-scarce country due to several reasons such as existence of the different topographic areas and urbanisation. Different topographic areas resulted in only 88% of South Africans having access to drinking water (Africa Check, 2018). In addition, the major challenge confronting developing countries such as South Africa is urbanisation. Brand South Africa (2016) reported that 65% or two-thirds of South Africa's population lives in urban areas, with most residing in townships. As an intervention strategy for safe water provision, the South African government had to invest US\$1 billion (R7.3 billion) in a drinking water project in Lesotho to provide water for the country's economic hub, the Gauteng Province. Thus, overpopulation increase the establishment of shacks causing burden to already water resources available.

Shacks in townships are one of the challenges confronting the new government led by the African National Congress (ANC). People build shacks on the banks of rivers such as the Jukskei River in Alexandra Township. During summer, especially during January and February, the country experience heavy rains. These informal settlements are negatively affected by the rain, with many fatalities being reported in the Alexandra area due to rain and floods (Mgquba & Vogel, 2004). During such disasters, the City of Johannesburg moves all people who are in the danger zone to a 'temporary' settlement. Available land in Diepsloot in the northern part of Johannesburg is used for temporary resettlement of the people from the banks of the Jukskei River until proper shelter is built for them. The programme known as the Reconstruction and Development Programme (RDP) under the Gauteng Department of Human Settlement supports the South African Constitution (1996) which states that all people shall have the right to

proper shelter and basic services which are water, sanitation and electricity. The City of Johannesburg adopted the RDP programme and supplies RDP houses to people who are temporarily staying in shacks in Diepsloot area. Every household must adhere to the RDP standard regarding the number of people occupying the house ( $\pm$ six persons). The stipulations concerning the size of the sewer system and access to both water (including the free six megalitres per month) and electricity services must also be observed.

The South African government in the Department of Water and Sanitation (DWS) 2016 drafted the National Sanitation Policy of 2016 that governs the sanitation around the country. Sanitation is one of the basic level to all individuals. However, there are populations living in informal urban settlements experiencing interrelated problems that they have no access or limited access to basic services. One of the main purposes of the National Sanitation Policy is to sustain the provision and monitoring the sanitation around the country through local municipalities. The provision and monitoring of the sanitation has country advantage by improve revenue collection as well as to protect human health from sanitation related challenges. South Africa is one of the fastest developing country in Southern Africa. However, with the current challenges confronting many SADC countries, Zimbabwe in particular, a great number of Zimbabwean people are entering South Africa seeking a better life. One of the areas in which such people first settle in is the Diepsloot area, which is confirmed by an increase in shacks within the area (Dambuza, 2009). In addition, residents who own the RDP houses have realised the business opportunity of building backyard rooms for rent. This situation in Diepsloot is an indication of what is happening in almost all the townships throughout the country. This mushrooming of backyard rooms has placed increased burden on the infrastructure of the country, including electricity and water services and sanitation systems. One of the most affected infrastructure is the sewer system that cannot cope with the load it receives every day. This is supported by Kings (2017) who reported that more than 50 000 litres of sewage flows into South Africa's rivers every second of every day. This wastewater or sewage water (black water) is the source of phosphate which results in the growth of cyanobacteria in rivers and dams such as the Hartbeespoort Dam (Mokoena, Mukhola, Okonkwo, 2016). Failure of the sewer system due to urbanization, led to poor management of waste-water however its economic impact has not yet been assessed, this study aimed at determining the economic impact of township urbanisation in South Africa using Diepsloot as a case study. Therefore the objectives of the study were firstly to determine the population size of townships and urban areas in South Africa then mapping Diepsloot waste-water (sewer) systems as indicators of the situation in this township. The information can then be inferred to other townships in the country. Thereafter, the study sought to determine the water quality of South African dams using eutrophication as an indicator of contamination. Finally, the study assess how the sewer system spillage impacts on the economy of the country.

## METHODOLOGY

### Study design, area and population

The study designed was mixed methods assess the qualitative cases reports of the waste water spillage reports and the estimated cost to service or improve sanitation while quantitative data was secondary data collected from search engine about the population of the country townships, area size and density per square kilometre. Further quantitative data were the marking and continuously monitoring the manholes number and spillage in the Diepsloot area as indicator of the challenges experienced by most of the townships in South Africa. The study was conducted in the Diepsloot area, a township located in the north of Johannesburg, South Africa. The study did not involve human population but rather focused on a network of waste-water systems in Diepsloot, particularly the manholes in the area that were assessed until saturation was reached.

### Sampling

A desktop study was conducted which examined municipal documents, reports and published articles. This literature review focused on the status of township urbanisation around South Africa and the quality of water in the country's dams. The data collected were presented in the form of graphs and tables. The collected data regarding the townships included the size of the township area, the number of settlements per square metre and the population per square metre compared with the urban areas without informal settlements. Only township data were reported in the study. Data for

rural and urban areas were excluded. Eutrophication was used as an indicator to gather data on the quality of water in South African dams. A global position system (GPS) was used to mark the inspection covers (manholes) for the sewer systems in order to determine overflow from the Diepsloot sewer system. The marked inspection covers were monitored for six months from August 2018 to January 2019 to determine whether they were losing waste or not. Colour coding was used on a map to indicate the level of spillage in the area (i.e. continuous, moderate or minimal loss of water).

## RESULTS AND DISCUSSION

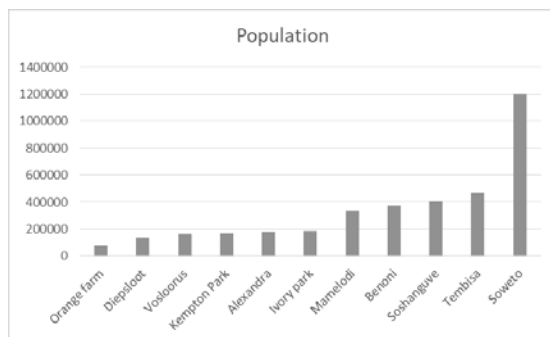
### Township population

Table 1 presents the South African population and the settlement density per square kilometre in the nine Provinces of South Africa. The population number per province corresponds with the density of persons per square kilometre. However, Table 1 shows that the areal size of each Province does not correlate with the population and density.

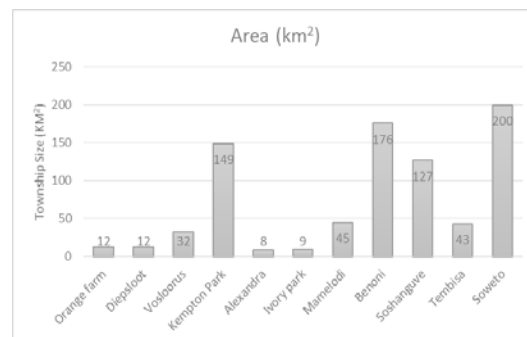
**Table 1: South African population and settlement density according to province.**

Rank	Province	Population (2011)	Area (km <sup>2</sup> )	Density (per km <sup>2</sup> )
1	Gauteng	12 272 263 (24%)	18 178	675.1
2	KwaZulu-Natal	10 267 300 (20%)	120 361	85.3
3	Mpumalanga	4 039 939 (8%)	76 495	52.8
4	Western Cape	5 822 734 (11%)	129 462	45.0
5	Limpopo	5 404 868 (10%)	125 755	43.0
6	Eastern Cape	6 562 053 (13%)	168 966	38.8
7	North West	3 509 953 (7%)	104 882	33.5
8	Free State	2 745 590 (5%)	129 825	21.1
9	Northern Cape	1 145 861 (2%)	372 889	3.1
<b>South Africa</b>		<b>51 770 561</b>	<b>1 220 813</b>	<b>42.4</b>

Gauteng Province is the smallest South African Province in area and has the largest population (more than 12 million) and the highest density per square kilometre (675.1). More than 23% of the country's population lives in Gauteng Province, while its total area is 2% of the total area of South Africa. The following figures indicate the population of various South African townships located mostly in the Gauteng province together with their areas in square kilometres and their densities per square kilometre. Figure 1 indicates the population of the Soweto Township, which has more than 1 million people residing in the area. Orange Farm with a population of 78 000 is the smallest of the selected townships. Diepsloot with a population of greater than 100 000, Alexandra with a population of 180 000 and Ivory Park with a population of 184 000 have the smallest area per square kilometre (see Figure 2) compared with the other areas, but they demonstrate the highest density population per square kilometre.

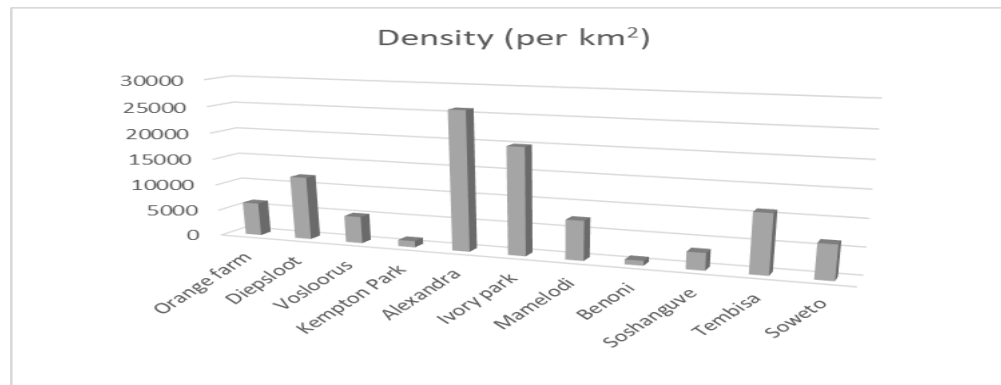


**Figure 1: Population of township.**



**Figure 2: Total area of township.**

The populations of the following townships: Mamelodi, Benoni, Soshanguve and Tembisa are reported to be between 200 000 and 500 000. However, the areas (km<sup>2</sup>) of these townships do not correlate ( $r = 0.672$ ) with the population per square kilometre. Kempton Park, Benoni Soshanguve and Soweto have more than 100 kilometres square area while all other townships are below 100 km<sup>2</sup>. In addition, Figure 3 indicates that the population density of Diepsloot is in excess of 100 000 persons per square kilometre and that of Alexandra is more than 25 000 persons per square kilometre.



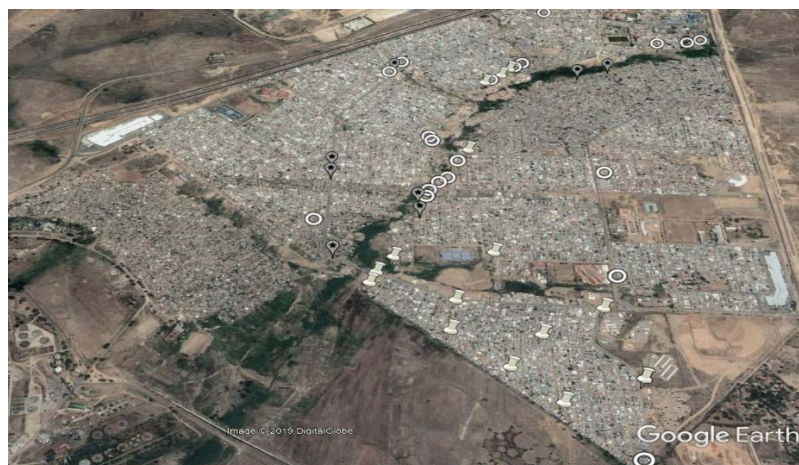
**Figure 3: Density of people per square kilometre.**

The population and the density per area were compared between the townships and the urban areas within the Gauteng province. On average, the population of each township is more than 300 000 while the population of each urban area is less than 100 000. However, the areal sizes of the urban areas are more than 20% of the townships. This is also demonstrated by the population density per square kilometre. The densities of the urban areas are less than 2 000 per square kilometre while the townships indicate densities of more than 8 000 per square kilometre. This inequality affects the basic services that should be provided for every settlement. The township Diepsloot was investigated and the basic services were assessed using waste-water management as the indicator to determine the impact of overpopulation due to urbanisation.

## Mapping Diepsloot manholes waste-water system

Figure 4 is the aerial photograph of the Diepsloot Township from Google Earth that was used to map the manholes around the area that were located with the GPS. The tags indicate the sewage manholes. In total, 37 manholes were identified. The paddle-with star tags indicate the manholes that were spilling continuously throughout the six-month study period (9.22%). The donut tags indicate manholes that spilled for  $\leq 3$  months (17.41%), and the white pushpin tags indicate manholes that did not spill at all throughout the six months of study (15.41%). The waste-water leaks shown by the paddle-with star and donut tags in Figure 4 contaminate drinking water and other surface water, and this affects the health of humans and animals.



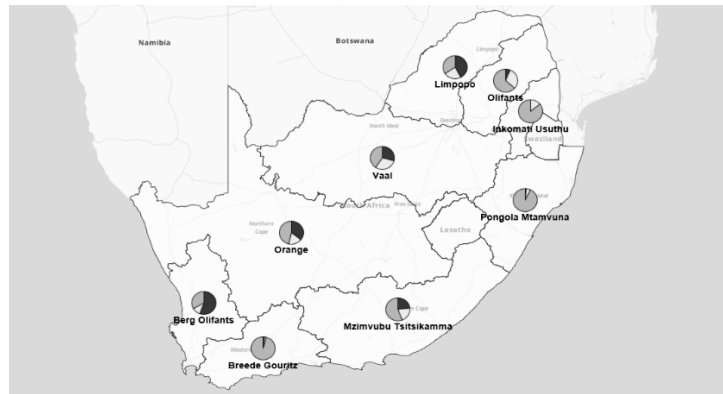


**Figure 4: Manholes in Diepsloot Township (Source: Google Earth).**

The water quality of the lakes, rivers and dams deteriorate due to the increase in microbes and other chemicals, which results in an increase in nutrient content that enhances the growth of cyanobacteria, thus contaminating drinking water by subsequent release of toxins. The study also revealed that the cause of waste-water spillage in townships is as a result of Poor Township planning which might be due to a lack of sufficient number of Professional Engineers in the country. According to Statista (2018), there is currently 1 engineer per 2 600 people, while the international benchmark is 1 engineer per 40 people. An increase in Engineers will assist in maintenance and upgrading of the sewer systems such as: unblocking the pipes, building wetlands to reduce contaminants and ensuring proper planning by enforcing the law in all new settlements. The enforcement of by-laws and the education of community members by Environmental Health Practitioners especially street vendors must be prioritised. These findings also revealed that the common cause of blockages include chicken intestines and bones, rags, nappies, tampons and sanitary pads, wet wipes, condoms, general litter, building materials and the build-up of cooking fat and oil. All of these are the result of an increase in urbanisation and small businesses in the densely populated province of Gauteng.

## Water quality of South African dams

Waste water spillage in the townships and rural areas of the country has affected the water quality of the rivers, lakes and dams. Figure 5 shows the surface-water quality in each water region. The three colours in the map indicate the percentage levels of water contamination due to eutrophication within each region. Black indicates high risk, grey is medium risk and white is no risk. The surface water of the following water regions is at high risk of contamination by eutrophication: Berg Olifants (high risk 55.6%, medium risk 11.1%, low risk 33.3%), Limpopo (high risk 42.3%, medium risk 23.3%, low risk 34.5%), Orange (high risk 35.7%, medium risk 17.9%, low risk 46.4%), Vaal (high risk 29.1%, medium risk 30.4%, low risk 40.5%), Mzimvubu-Tsitsikamma (high risk 23.5%, medium risk 20.6%, low risk 55.9%) and Olifants (high risk 6.2%, medium risk 30.3%, low risk 63.5%). The surface water of Breede Gouritz (high risk 1.7%, medium risk 2.5%, low risk 95.8%), Pongola-Mtamvuna (high risk 1.7%, medium risk 5.6%, low risk 92.7%) and Inkomati Usuthu (high risk 0.0%, medium risk 14.3%, low risk 85.7%) are not at risk of contamination by eutrophication.



**Figure 5: Surface-water quality in water regions of South Africa**  
(Source: DWS, 2018).

## Impact of poor waste-water management on the economy

Figure 4 indicates water leaks which are part of the 45 000 leaks in the City of Johannesburg (Jager, 2017). For Johannesburg water (Joburg-water) to attend to all the water-system problems within the city, there will be a shortfall of approximately R5.8 billion. In order to be able to upgrade and replace all the sewer systems in the City of Johannesburg (which is 231 km), Joburg City will need R435 million per annum. Annually, renewal of sewer pump stations costs R4 million, renewal of waste-water treatment works requires R280 million and sewer upgrading and extensions require R102 million. For the sewer upgrade, replacement and renewal Joburg City will need a total of R821 million per year. The Hammanskraal community that forms part of the City of Tshwane has estimated the cost to correct the sewerage spills to be R180 million (Kruger, 2018). According to *Independent Online (IOL)* (2018), blockages in the City of Cape Town costed the city R270 million for the year 2017/2018. This waste-water system of City of Cape Town is also operating under tremendous stress through misuse, however, most people are not aware. The main economic effect of waste water in South Africa involves servicing all waste water systems, upgrading old systems and educating the users. Waste water contaminates surface water, which comprises the main sources of drinking water in most parts of the country. Since it is very expensive to treat water for drinking purposes, surface water is also no longer safe for irrigational purposes (Eramus, 2017), which results in loss of farming products due to the lack of market. Much of the surface water in South Africa is used for recreational activities such as swimming, fishing and boating; however, more than 50% of the dams that offer these activities are now affected by the contaminant (Oberholster and Botha 2014). Contamination of recreational areas also affects the tourism industry, which boosts the economy of the country significantly. Because of the poor water quality, the South African government is importing water from Lesotho, a process that is costing the country billions of rand.

## CONCLUSION

South African townships are over populated, and waste-water systems are continually blocking while water is leaked into the roads and nearby rivers. The main cause of the blockage is placement of unwanted materials into the system by the communities. To permanently solve the problem will cost the State billions of rands, which the country is struggling to provide due to the current status of the economy. This spillage has compelled the country to import drinking water which is not solving the core problem. Education of the communities, small businesses or informal businesses might be the current solution to try and minimise the solid waste that is disposed into the sewage system. This will minimize the Environmental Health risks associated with these practises and prepare communities on how to handle upgraded infrastructure should funding become available.

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# IT INVESTMENT DECISION MAKING: CASE STUDIES ON THE IMPLEMENTATION OF CONTACTLESS PAYMENTS IN COMMERCIAL BANKS OF KAZAKHSTAN

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## ABSTRACT

*This research explores the practice of decision-making in commercial banks in Kazakhstan. It focuses on recent technologies, such as contactless payments and QR code, and uses interviews with bank executives and industry practitioners to gain an understanding of how decisions are made and the role of financial assessment methods. The aim of the research is (1) to study the importance of financial techniques in evaluating IT investments; (2) to understand the role of different expert groups; (3) to explore how market trends and industry features affect decisions; (4) to build a model that defines the real practice of decision-making on IT in commercial banks in Kazakhstan.*

**Keywords:** technology investment, actor groups, decision making, retail banks.

## INTRODUCTION

Information Technology (IT) is a core element of the banking system. IT is a tool to provide and improve services, but requires investment, which requires organizations to properly assess projects and make the right decision on them. The banking sector was one of the earliest adopters of automated information processing technology and today banks are devoting significant resources to IS/IT investments to maintain competitiveness.

For financial intermediaries, IT is not only a technical engine that provides service, but also an investment that requires proper assessment and decision-making. IT projects have several differences compared to standard capital investments. For instance, the benefits of IT are intangible and may only be realized over a long period of time. These strategic and competitive advantages of IT are difficult to quantify. In addition, because of novelty, there is a high level of risk and uncertainty in investing in new technology. According to theory, such characteristics of IT require not only the application of financial assessment methods, but also negotiation and interaction of expert actor groups to make an effective decision (Galbraith, 1972; Hage, 1980; Bijker and Pinch, 1984; Scarbrough and Corbett, 1992; Fincham et.al, 1994; Samakovitis, 2007; Lempinen and Rajala, 2014).

The features of IT investments and limitations of financial assessment methods are widely discussed in prior studies. Traditional techniques of Discounted Cash Flow (DCF) methods such as Net Present Value (NPV) and Internal Rate of Return (IRR) act as a guide in decision-making, as they are not able to consider the abovementioned features of IT projects and focuses on increasing shareholders wealth. The main limitations of the DCF techniques are that the methods do not address IT benefits quantification, or the behavioural and organizational factors of decision-making (Ballantine and Stray, 1998). Ashford et.al. (1988) and Weaver et.al (1989) state that capital budgeting does not address quantification of benefits and estimation of cash flows. Ballantine and Stray (1998) also point out that capital budgeting methods are not able to consider unanticipated benefits and long-term benefits of IT investments. Brealey and Myers (1988), Brigham and Gapenski (1991), Van Home (1986), Weston and Brigham (1987) declare that, in practice, for IT investments there are managerial decision maker criteria that should be considered, and this cannot be addressed by capital budgeting techniques.

Capital budgeting theory does not address organizational and behavioural factors that are involved in the practice of capital budgeting (Hellings, 1985; Kennedy, 1986). According to Ashford et.al. (1988) the non-discounted cash flow technique, payback, ignores cash flows after the desired period of payback, which can be as short as 2 or 3 years. They state that payback is used because of its simplicity, but it ignores cash flows beyond the cut-off point. Considering the abovementioned limitations of the assessment methods it is worth examining actual practice to identify the role of these techniques in the decision-making process.

The theoretical framework suggests that the process is socially constructed, where actors from different backgrounds and experience interact with each other to make a decision. IT investment decisions are strategic, high-risk, high-complexity and highly political decisions, therefore require the involvement of numerous active groups (Galbraith, 1972; Hage, 1980; Bijker and Pinch, 1984; Scarbrough and Corbett, 1992; Fincham et.al, 1994; Samakovitis, 2007; Lempinen and Rajala, 2014). Garlappi et.al. (2017) contributes to corporate finance literature by identifying disagreement between groups of agents holding heterogeneous beliefs as a new source of inefficiency. As involved actor groups have diverse interests and perceptions towards IT, it is worth examining the role of each of them and the way how they achieve a shared understanding on IT and make a final decision.

The research uses Kazakhstan, the largest economy in Central Asia, for the analysis. As with many former Soviet Union republics, Kazakhstan followed the same path and its economic system transitioned to an open market system, which started with price liberalization and privatization in early 1992.

After achieving the status of sovereign state in 1991, there was a need for further reforms of the banking system of the republic, establishing its legal framework, and the introduction of new policies for the regulation of the banking sector. Currently, Kazakhstan has a two-tiered banking system. The first tier is comprised of the National Bank of Kazakhstan (NBK), which is charged with overall supervision of the banking sector and reports to the president. The second tier includes 32 commercial banks.

Digital technology plays an increasingly important role in the development of the country's economy, therefore, the state program "Digital Kazakhstan – 2020" was implemented to provide maximum implementation of smart systems in the basic sectors in order to build a more open, accessible and competitive economy of the country. The main purpose of the program is to create all the necessary conditions that will facilitate the transition to a digital society. Considering that the government of Kazakhstan is making a big push in IT and that the banking sector has a significant influence on the economy, it is worth studying the emerging market context and the practice of the banks on decision-making on IT investments.

To sum up, the research motivation is to examine the decision-making process on IT projects according to recent experience of case studies, such as contactless payments and QR code implementation in Kazakhstan. The research aims to address the following questions:

**Q1: How do organizations decide on their IT investments and how should they decide?**

What is the role of financial assessment methods on a final decision?

**Q2: What is a more rational decision on IT according to the viewpoints of involved actor groups?**

What are the unchallengeable standards of assessing IT investments within banks?

## **METHODS**

The choice of methodology is strongly related to the nature of the studied topic. According Samakovitis (2007), decision making on IT is a social process, where continuous interaction and negotiation between human agents takes place, rather than a measurable entity, thus it should be looked at through qualitative means. In addition, it is the process that involves both formal and informal procedures and highly depends on companies' policies, procedures and values. Therefore, I adopt a social constructivist approach, as I follow the perspective that decision making on IT

is informed by participants' education and training, and shaped by their past experience. I take the view that the viewpoints of involved actor groups, the corporate culture of organizations and the industry dynamics of the country shape attitudes and beliefs of both participants and companies towards technology, which also indicates a social constructivist epistemology.

Secondary research plays an important role, as publicly available data enables me to obtain a better understanding of the shapes of Kazakhstan banking. In addition, during using desk research, I give attention to identifying the pertinent contemporary issues and problems the industry faces. Selecting the financial institutions on which case studies are drawn are made with reference to (1) the key industry players, (2) the higher levels of publicity of IT projects and (3) accessibility of the relevant experts in companies. It is a continuous process beginning with early secondary research and continuing through a networking process and conducting interviews. The study will be conducted by considering the banking system, the historical evolution of banking technologies, current industry trends and dynamics in Kazakhstan. The result is a view of the landscape – geographical, economic, social and political – in which decision-making on IT is generated and developed as a problem.

A social constructivist approach to this research is sufficiently accommodated by the case-study, interview-based methodology. For this study, I conduct 23 semi-structured interviews. Blaxter et.al. (2006) declare that semi-structured interviews are associated with asking open-ended questions rather than strictly ordered questions, therefore more appropriate for explorative research. The research questions are broad and require actor groups to disclose their attitudes, perceptions and assumptions on IT. Semi-structured interviews enable the researcher to ask a set of predefined open-ended questions and to get reliable qualitative data. All interviews are transcribed and analyzed using the software Nvivo.

This paper uses 23 semi-structured interviews with bank practitioners in 7 financial organizations of Kazakhstan and addresses the introduction of contactless payments and QR code technologies. As the research is in progress, this paper outlines the initial findings. The research adopts Informed Grounded Theory (Thornberg, 2011), which is a variant of Grounded Theory (Glaser and Strauss, 1967) that starts with collecting empirical data (Grounded) and being informed by existing research literature and theoretical framework (Informed). Financial institutions are chosen as case studies according to their role in the market, publicity of IT projects and accessibility of potential interviewees. Explorative and descriptive case studies are conducted and enable a focus on particular firms and their IT projects by examining the interactions between the parties involved in IT projects decision-making.

As it can be seen in Table 1, the interviewees are from a wide variety of backgrounds and positions.

**Table 1: Characteristics of interviewees.**

<b>№</b>	<b>Position</b>	<b>Background</b>
1	Senior Manager	Computer Science
2	Project Manager	International Economics
3	Chief software developer	Information Systems
4	Java software developer	Information Systems
5	Android developer	Computer Science and Software development
6	Project Manager	Applied Mathematics
7	Lead Project Manager	Electronic and Information Engineering
8	Software developer	Computer Science
9	Head of Online systems and self-service devices development division	Computer Science

10	Chief Project Analyst	Information Systems
11	Senior Risk manager	Economics
12	Senior Software developer	Computer Science
13	Deputy Director of the banking system development department	Information Systems
14	Director of Risk Management Department	International Business Economics
15	Deputy CEO	Software Engineering
16	Head of IT Department	Information Systems
17	Senior Software Developer	Information Systems
18	Full Stack Developer	Computer Systems and Software Engineering
19	Director of Project Management	Economics
20	IT Project Manager	Finance
21	Head of Digital Bank	Management Information Systems
22	Senior Risk Manager	Finance and Credits
23	Product owner	Finance

## INITIAL FINDINGS

From the 23 interviews and their analysis an understanding the role of financial assessment methods, relevant groups' capacity and power, how perceptions and interests of actor groups diverge, and how consensus around a final decision is achieved.

The interviews outcomes support the prior studies and show that financial assessment methods do not play an essential role in the final decision (Lumby, 1981; Carr et al., 1994; Van Cauwenbergh et al., 1996; Samakovitis, 2007). According to Interview 11:

*“here I can say that this is a client service, for example, several key indicators, such as conversion from each client, for example, just traffic. From my experience, I can say that the adoption takes place despite positive or negative NPV or IRR if the project is connected with the need of the company to achieve some goals. Indicators can be negative financially, but it can be quite functional in terms of achieving some goals of companies”.*

This supports the prior studies that show that financial and risk analysis techniques have little impact on strategic decisions (Carr et al., 1994; Van Cauwenbergh et al., 1996). The evidence suggests Decision-making is determined by strategies of the banks, product innovativeness and power relations of the involved practitioners.

Projects priorities defined by the strategies of the companies (Interviews 16, 17,18,10,20,21). Product innovativeness is described to be more important than financial assessment outcomes and innovative, first-to-market projects gain a high priority (6, 7,10, 12, 19, 20). Interview 7:

*“I can tell you about the implementation of apple pay. There were no commercial purposes, it was more about innovativeness...Now our bank also tries to offer the first innovative decisions in the market. The implementation of apple pay was planned last year, but it was not allowed to enter the market on the state level. When it entered, there were some negotiations with Apple, but we always wait until it is allowed on the state level. As soon as it was allowed, it was implemented. But it was not with some commercial objective, it was just innovativeness and the banks image”.*  
Interview 7: *“I remember how financial risks were written for apple pay, they wrote them very neatly like we will implement apple pay, there is that much number of suppliers, that much of things, but there was no proper financial assessment, I am giving the experience of our bank, there was no such evaluation”.*



Apple pay and QR codes are considered to be innovative projects and were mostly implemented for branding purposes (Interviews 6, 7, 9, 10, 12, 19). Interview 12:

*“These are the projects that influence image and appearance of the bank. Banks mostly implement such trendy projects like apple pay or some new innovative things and these innovative things always get the highest priority”.*

Interview 19: *“By itself, innovation is not needed, it is needed to improve the image, respectively, it affects competitiveness, for advertising purposes, that clients will know the bank. Brand and reputation may be considered as a benefit by the strategy, so it can be easily used”.*

Interview 19: *“We usually calculate ROI, repayment of the initial investment, but there is no such goal, this is not a product that brings big profit to the bank”.*

It can be seen that the role of financial assessment methods is not essential in the final decision and there is a high impact of companies' strategy, customer experience, firm image and product innovativeness on decision-making on IT.

The accounting and Finance literature suggests applying sophisticated Discounted Cash Flow (DCF) methods such as Net Present Value (NPV) and Internal Rate of Return (IRR) as the dominant ones (Baker et.al, 2017). However, according to interviews they are not widely used, as QR code and apple pay are described as services for clients, hence it makes difficult to calculate the exact amount of cash flow. There are rather the other financial metrics that are applied to calculate profitability of IT investments. For instance, Net Promoter Score (NPS) is associated with Return on Investment (ROI). According to interview 15:

*“...we use customer satisfaction measurements, NPS, which is also return on investment, there is no promotion and we look explicitly. Let's say, if we see that after introducing service or product, we managed to raise NPS, we consider it as a good product and satisfied customers, we consider it as a good investment”.*

Customer Satisfaction Index (CSI) is also one of the important financial metrics (Interviews 4,6,15,19). Interview 6:

*“I will say if earlier banks did not pay enough attention to customers and thought that banks should provide a list of some standard services, cover some range of basic needs and customers will find suitable ones for themselves, now banks are trying to assess customers' attitude through NPS, they are guided by this, how much introduction of products affect this indicator”.*

The indicators NPS and CSI are calculated after the implementation of the technologies. The sophisticated DCF methods such as NPV and IRR are not widely applied to evaluate IT investments. Costs and benefits analysis is conducted, where costs can be easily calculated and benefits are largely assumed and predicted (Interviews 9, 13, 14, 18, 19, 20, 23). This supports the prior studies that state that intangible benefits of IT investments are difficult to quantify and DCF methods fail to address this feature of IT investments (Ashford et.al., 1988; Weaver et.al, 1989). The interesting finding from empirical data is that NPS and CSI are considered as ROI and profitability of IT investments is associated with positive results of these indicators.

Role of users in decision-making on IT was not studied by prior studies. For example, Samakovitis (2007) studies the implementation of online banking in the UK banks and identifies three groups of social actors: practitioners, observers and the Community of Received Wisdom (CORW). From my point of view, role of users should be examined further to build a model of the practice of group decision-making on IT in commercial banks of Kazakhstan.

According to the interviews, users are involved in the process of product development, certainly in testing Minimum Viable Product (MVP) or demo versions of technologies. Clients are engaged in individual testing, interviews and focus groups to provide retail banks with feedback on their personal use of the product (Interviews 12, 20). Interview 20:

*“This is usually not at the software developing stage, but at the stage of implementation and testing. There is a pre and post environment, where, for example, testing is done with focus groups, where customers respond whether or not they understand where the button located and how they need to click it, etc. Yes, we carried out such focus*

*groups, but it was already before the introduction itself. It went through the tests, after that there were some adjustments, so it was literally 5% change, no global ones were made.”*

It can be seen that users can be considered as one of the social groups that participates in the process and their role will be studied further.

According to the interviews, during the last 5 years several banks experienced transformation. Digital and online departments have been created as a project office and they involve experts with different backgrounds. Interview 9:

*“digital department is always the focus, and my team is always under some pressure, but let's say we are in the center of attention, and we interact. There is separate online department that was created recently, too.”* Interview 21: *“At the moment the digital bank department is the people who are the first, the fastest and strategically undergone the digital transformation. Now we carry it inside the entire bank, because if you don't have a digital core, you will never create digital bank.”*

Also, it can be seen that this department plays the dominant role, interview 21: *“...in terms of decision-making on implementation the bank focuses on the digital bank department”.....“digital bank department always leads locomotive”.*

Regulatory barriers are common in the Kazakhstani banking sector. Interviewed practitioners noted that usually a delay to IT projects happens due to the strict policies of the National Bank of Kazakhstan. Legal departments and project managers tend to have several interactions to find a way to circumvent regulatory barriers. Project managers and legislative practitioners enter into negotiations in a problem-solving manner. Interview 1:

*“We mostly have debates with legal department. They say this is not legally, then we start to think everything with legal department, because we are one team, although they tell us this is wrong, then they say let's see here”.*

It should be noted that negotiation takes place not only between the involved actor groups, but also with the regulator, the National Bank of Kazakhstan. The new projects that are restricted by the current policies can be tested in the regulatory sandbox. This shows that the National Bank of Kazakhstan supports the new product initiatives and is focused on improving the flexibility of regulation of the financial sector and the development of financial services.

There are also specific characteristics of Kazakhstani industry. For example, small market size, Kazakhstan is the 9<sup>th</sup> largest country in the world with total population of 18 million people and a low population density. According to statistics of July 2017, the number of economically active people in Kazakhstan is 9,032,075. There are only four big cities (Almaty, Astana, Karagangy, Shymkent) and people who earn middle income and access to the Internet is still a problem in some remote areas. According to the data, 77% of the population has access to the Internet. The small and widely spread population is noted to be a barrier for technology development by interviewees. Compared to European countries, FinTech in Kazakhstan is in a developing stage and limited with offering only payments and online credits. Due to this fact, Kazakhstani banks consider themselves as IT companies and this creates a motivation to maintain their leadership in offering innovative technologies. This makes a big push to commercial banks and they tend to handle innovations by themselves. It is widely accepted by the banks that they are not meeting the needs of customers if FinTech is able to offer better services. There is also the accepted perception that the wheel does not need to be reinvented and successful technologies from neighboring (Russia, China) and developed (USA, the UK, Germany) countries are widely studied and adopted by considering the features of the Kazakhstani market. Banks in Kazakhstan mostly rely on the successful experience of Tinkoff Bank, the digital bank in Russia, and WeChat, social network in China.

## **FURTHER PLANS**

According to empirical data, decisions on IT in commercial banks of Kazakhstan are made on strategic ground and role of financial assessment methods is not essential. First-to-market products take high priority, as they affect brand

of the banks. Role of clients is also important and currently the banks are paying more attention to customer experience. Customers are involved in the product development stage by testing the products and providing feedback. Customer satisfaction is one of the important indicators for the banks and it is considered as return on investment. Experience of neighboring and developed countries is also essential, as the banks tend to study foreign industries and adopt innovations that are popular and successful in these markets. Such products are studied and adopted by considering the features of Kazakhstan's own industry. Role of practitioners and involved groups' capacity and power will be studied in depth in the future, as one of the aims of the research is to examine reasons for disagreement, conflicts resolution and the way how a final decision on IT is made in practice. In addition, group decision making under uncertainty and how shared understanding of IT is achieved will be studied further.

So far, data collection is almost complete, but 7 more interviews need to be completed. Then, the experience of Kazakhstani banks on decision-making on IT investments, a case of QR code and contactless payments implementation can be generalized, which will enable me to build a conceptual model.

As the research adopts an abductive approach, for the next stage there is still more work to be done on reflecting on theory and empirical data. A literature review on group decision-making under uncertainty, power relations in organizations, role of users in product development, influence of product innovativeness, firm image on decision-making will be completed and compared with the empirics. In addition, to have an understanding of socio-economic condition in the country features of the banking system, the historical evolution of banking technologies, current industry trends and dynamics in Kazakhstan will be further studied. The result will lead to a view of the landscapes – geographical, economic, social and political – in which decision-making on IT is generated and developed. Data analysis is in an early stage and as more engagement with empirics and second-order coding need to be carried out.

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# BRIQUETTING OF WASTE BIOMASS: A POTENTIAL SOLUTION FOR YOUTH UNEMPLOYMENT IN SOUTH AFRICA

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## ABSTRACT

*We highlight the significant impact that the briquetting of waste biomass value chain could have on the creation of decent work for thousands of unemployed youth in South Africa. We also present the processes that Tshwane University of Technology has followed to identify the relevant partners and acquire the necessary resources for the development of a project for sustainable youth economic development across South Africa.*

**Keywords:** Youth unemployment, waste biomass briquettes, sustainable development goals, charcoal.

## INTRODUCTION

Globally, youth unemployment has been broadly static between 2014 and 2017, and it remained moderately higher than before the global financial crisis (WEF, 2018). This translated into an estimated 71 million unemployed youth worldwide in 2016 – half a million more than the previous year. In addition, it is estimated that some 156 million employed youth, or 37.7 per cent of working youth, in emerging and developing countries were living in extreme or moderate poverty in 2016 (i.e., living on less than US\$3.10 per day) (ILO, 2016a). Youth unemployment is considered a corrosive legacy, with the capacity to hinder young people's integration into traditional patterns of economic life, such as earning, saving and building careers (WEF, 2018). Youth are subjected to long-term unemployment; low-quality, part-time and temporary employment; weak links between education and work (WEF, 2018). During the Economic Forum Survey of more than 30,000 young people globally conducted in 2017, respondents cited the “lack of economic opportunity and employment” as the most serious issue facing their country (WEF, 2018). Across Africa, for example, youth unemployment decreased slightly over the past decade, but levels of working poverty among the young remain high, with about 70% of young people living on less than US\$3.10 per day (WEF, 2018).

Working poverty rates among youth in Sub-Saharan Africa was nearly 70 per cent in 2016, translating to 64.4 million working youth in that region living in extreme or moderate poverty (less than \$3.10 per day). The region continues to report the highest youth working poverty rates globally (below US\$1.90 per day (ILO, 2016a). The number of poor working youth has increased by as much as 80 per cent for the past 25 years. This is coupled with the fact that young workers in the region have one of the highest probabilities of living in poverty in comparison to adults (ILO, 2016b). Moreover, while the youth labour force participation rate is the highest in Sub-Saharan Africa at 54.2 per cent, more than half of all active youth in South Africa remained unemployed in 2016, representing the highest youth unemployment rate in the region (ILO, 2016a).

In the first quarter of 2018, the unemployment rate in South Africa among young people between the ages of 15–34 was 38,2%. Thus implying that more than one in every three young people in the labour force did not have a job (Stats SA, 2018). Similarly, of the 10,3 million persons aged 15–24 years, 32,4% (approximately 3,3 million) were not in employment, education or training (NEET) – implying that close to one in three young South Africans between the ages of 15 and 24 years were disengaged with the labour market in the first quarter of 2018. This had a huge influence on the burden of unemployment, as the youth accounted for 63,5% of the total number of unemployed persons (Stats SA, 2018). Moreover, Stats SA also made a significant pronouncement that there is no relationship

between high rate of youth unemployment and the level of education. For instance, the graduate unemployment rate was 33,5% for those aged 15–24 and 10,2% among those aged 25–34 years, while the rate among adults (aged 35–64 years) was 4,7%. However, those aged 15–24 years were more vulnerable in the labour market with an unemployment rate of over 52%, an absorption rate of about 12,2% and a labour force participation rate of 25,6% (Stats SA, 2018). The NEET rate, seen in conjunction with unemployment rates over 50%, suggests that South African young people face extreme difficulties engaging with the labour market (Stats SA, 2018) and something should be done to address this challenge. The production of briquettes from waste biomass charcoal can play a major role in providing a sustainable solution for youth unemployment in South Africa. This is in cognizance of the fact that factors such as lack of experience and length of unemployment may increase the vulnerabilities of these young people in the labour market (Stats SA, 2018).

Charcoal is produced in Africa throughout the year, although there are seasonal variations (Zulu and Richardson, 2013). It is cleaner and easier to use than firewood, cheaper and more readily available than gas or electricity, and has become one of the biggest engines of Africa's informal economy (Onishi, 2016). Firewood and charcoal alone provide more than 40 percent of energy used in Africa and due to its desirable qualities, Africans use more than 23 million tonnes of charcoal every year, making it a multi-billion dollar industry (Iwuoha (2017). The growing demand for charcoal in Africa is driven by high population and urbanization growth rates, which would make charcoal the major primary source of energy for most urban dwellers for at least another generation (Zulu and Richardson, 2013). In most countries in eastern and southern Africa, over 90% of urban households use charcoal to some extent (IEA, 2002; Zulu and Richardson, 2013). Charcoal consumption in Africa is expected to increase considerably and faster than other regions of the world, doubling by 2030 versus a 24% increase for firewood (Arnold et al., 2006; Zulu and Richardson, 2013).

This paper highlights the significant impact that the briquetting of waste biomass value chain could have on the creation of decent work for thousands of unemployed youth in South Africa. The paper also presents the processes that Tshwane University of Technology followed in identifying the relevant partners and acquiring the necessary resources for the development of the project for sustainable economic development of the youth in the country.

## **MATERIALS AND METHODS**

This section explains the processes that were followed in developing the project for youth unemployment in South Africa using waste biomass to produce the briquettes. It should however be noted that this project is still ongoing.

### **Identification of Resources**

This process involved the identification of all the equipment and the raw materials that will be needed to develop the briquettes. This process began towards the end of 2017 with literature review about the equipment that could be used, and the search for and identification of the local suppliers of machinery (e.g., retort, hammer mill and briquette making machines) and raw materials such as starch, waste biomass and pulverized charcoal. This process also involved identifying and contacting research institutions, engineering businesses and accredited laboratories that could provide their services for the manufacturing and analysis of the developed prototypes.

### **Development of Formulations and Prototypes**

Different ratios of mixtures of pulverized charcoal, water and starch (i.e., binder) were developed in order to determine the optimal mixture for the production of briquettes. The mixture was only varied between water and starch amount until the optimum mixture was achieved. Furthermore, the correct size of the briquette prototype (samples) was determined. These two variables were accomplished after a number of trial and error in the laboratory, which took many months (about 3 months).

## Identification of Partners

This part involved the identification of the organizations (locally and abroad) that we could partner with in rolling out this project. The common denominator was the contribution each organization was to make across the project value chain, particularly towards the implementation and sustainability of the project. The targeted partners were those companies that were dealing with the production of charcoal and briquettes, cooperatives involved in the eradication of invasive alien plant species, and companies that were producing starch and cookstoves, respectively. Moreover, municipalities and organs of states were also identified and approached, such as the Department of Agriculture, Forestry and Fisheries; Environmental Affairs; and Water and Sanitation, mainly because of their involvement in the eradication of invasive alien and indigenous encroachment plant species.

## Business Development Model

The business model that will be applied will ensure that young people get employed and businesses owned by women and the youth are contracted across the project value chain indicated in Figure 1.



**Figure 1: Briquette business value chain (Source: Authors).**

First and foremost, the project will have a national footprint. However, the project will be implemented in phases in order to ensure that the processes and critical aspects of the projects are well piloted and understood. As a result, the initial pilot projects will be implemented in the City of Tshwane (Gauteng province); Manyatseng Local Municipality (Free State Province); Magareng Local Municipality (Northern Cape Province) and Taung Local Municipality (North West Province). The approach would include extensive involvement of these institutions to ensure their support and input towards the sustainability of the project in those respective areas. The local municipalities will assist with the identification of women and youth owned companies and/or cooperatives that could be included in the business development programme. Furthermore, the Sector Education and Training Authorities (SETAs) and the different provincial departments of Environmental Affairs; Water and Sanitation; Agriculture; and Public Works will be involved in skills development of the youth participating in the programme in various niche areas to empower them in critical business skills relevant to the briquette business value chain. Furthermore, the Department of Environmental Affairs and the Department of Water and Sanitation will work very closely with businesses participating in the pilot project and will assist in the identification and mapping of areas infested with invasive alien species in government owned land and will also help with the eradication of those plants, which will then be used to produce briquettes. On the other hand, NAWASSCO and SCODE will be involved in skills transfer and business development and mentoring, as well as in the manufacturing of cookstoves, retorts, briquette making machines, etc. This approach will create business and employment opportunities in different parts of the country and will assist in the expansion of the project to other parts of the country, where the project has not yet been implemented. This will put many young people in employment and also developing businesses owned by women and the youth, especially those in rural areas.

## RESULTS AND DISCUSSION

This section explains the results in relation to the main processes explained in the previous section. In terms of the resources needed for the project, various equipment were found in the internet, such as the retort and the hammer mill. Furthermore, companies that produce starch and the ones that are making charcoal were also identified. These included Tongaat Hullet and Bakgat, which produce starch and charcoal, respectively. Both companies are based in Gauteng

Province, though Tongaat Hullet is in Germiston and Bakgat is in Pretoria. Bakgat kindly supplied the pulverized charcoal to be used for the production of briquettes. One accredited laboratory, Bureau Veritas, was identified for elemental analysis of the briquette prototypes. Meanwhile, the Sustainable Energy Technology and Research (SeTAR) Centre at the University of Johannesburg was identified and arrangements have been made for the analysis of the heating capacity of the briquettes. Furthermore, the City of Tshwane was contacted and after a lengthy interaction, the City agreed to kindly supply with the waste biomass for this project. The City Parks Department would transport the biomass waste, particularly the tree trimmings, to the briquette manufacturing site once operational. The main reason for the City to agree was the fact that this project will be creating jobs for many young people in the City and thus contribute towards the City's economic growth. Moreover, this presented the opportunity for the City to align itself with its 2015 Green Economy Strategic Framework. This Strategic Framework provides a strategic guide towards a low-carbon, climate-resilient and resource-efficient growth trajectory (City of Tshwane, 2015). In fact, this Strategic Framework is encouraging product re-use, recycling and material recovery. It is also advocating for adaptation actions focused on improving energy efficiency and developing renewable energy supply options, as well as investing strategically in green innovation and technology (City of Tshwane, 2015).

While still on the identification of feedstock, several other organizations were contacted. They included a women owned cooperative at Ladybrand, in the Free State Province called Mohoma Basadi Cooperative. This company is constituted of seven women, six of which are youth (i.e., < 34 years old). Further, the company has been involved in the eradication of invasive alien plant species since 2010 under the stewardship of the Department of Water and Sanitation through the Working for Water programme. They have tons of waste biomass stockpile of wild pine, black wattle, eucalyptus. Moreover, they have also stockpiled Bankrupt bush (*Seriphium plumosum*) they cleared under the land care programme of the Department of Agriculture, Forestry and Fisheries. This woody dwarf shrub encroaches into both planted pastures and natural veld, thus affecting the grazing land and it is a serious problem in most of the provinces of South Africa. The provinces that are worst infected, are the North West, Free State, Eastern Cape, Mpumalanga, Gauteng and certain parts of KwaZulu-Natal (Jordaan, 2009). The waste biomass of this plant will also be used to produce briquettes together with the biomass from the invasive alien plant species. Mohoma Basadi Cooperative will be the strategic partner in the Free State Province and will be responsible for the production of briquettes as well as training the youth in that province on how to make and sell the briquettes. Other potential partners that were approached were the provincial Department of Water and Sanitation, and the Department of Environmental Affairs in the Northern Cape. These two Departments are jointly steering the Working for Water and Working on Waste programmes, which are focusing on the eradication of invasive alien plants and ensuring that both social and ecological sustainability are achieved through the implementation of sustainable waste management practices (DEA, 2015, 2019), respectively. The opportunity that is presented by these Departments is that they cut the invasive alien plant species and leave them to dry out and eventually decompose. However, the challenge is that the waste biomass is not properly disposed of and in some instances it was found to be affecting the nearby river systems. So, by using the waste biomass and turning it into briquettes is one way of properly managing it. Though no formal partnership has been formed as yet with these two Departments, they have however committed to supporting the project, especially on the part of training the youth on how to harvest the invasive alien plants. Another partner that was contacted was the Provincial Department of Rural Development and Land Reform in the North West Province due to its involvement in the eradication of the Bankrupt bush and clearing of encroaching plants in the state owned farm land. The Department has pledged its support for the economic value addition of the waste biomass from its clearing activities.

Although it was not a hustle to identify and interact with these organizations, the great challenge was to identify local companies that were either selling or building the retort (charcoal manufacturing equipment) and the briquette maker. During the search for the retort, we came across the company called Nakuru Water and Sanitation Services Company Ltd (NAWASSCO) in Kenya, that is producing briquettes from waste sludge. The company is producing round briquettes by using the rotating drum. This equipment is a simple and cost effective design (see Figure 2). A scoping visit to Kenya was arranged. During the visit they showed one of the authors their briquette making machine and took him through the entire process of making the briquettes. They produce round 50 mm briquettes as shown in Figure 3.





**Figure 2: Rotating briquette maker from NAWASSCO (Source: NAWASSCO with permission).**



**Figure 3: Briquettes made by rotating briquette maker at NAWASSCO (Source: NAWASSCO with permission).**

One important aspect about the briquette making machine is that it can be made by semi-skilled people, which means that the youth of South Africa do not have to be artisans to produce this equipment. We have since identified several companies to produce the same design and it will be used during the pilot phase of this project. Apart from the briquette making machine, the visitor was also introduced to the company that is producing cook stoves (see Figure 4), SCODE Ltd (Sustainable Community Development Services), which is also based in Nakuru.



**Figure 4: Cook stoves from SCODE (Source: SCODE Ltd with permission).**

They have partnered with NAWASSCO and the nature of the partnership is that both companies are jointly promoting their respective products (i.e., cook stoves and briquettes). Once the Memorandum of Understanding is concluded, SCODE will partner with TUT and NAWASSCO, and will be responsible for the training of the youth in South Africa on how to make the cook stoves. Moreover, both NAWASSCO and SCODE will help in the development of the business models for the sale of briquettes and cook stoves.

Regarding the production of briquettes at TUT, a small quantity of briquettes was made at the laboratory. Round briquettes were made using the pulverized charcoal supplied by Bakgat. The prepared briquettes were also 50 mm in diameter (see Figure 5) and were made using hands.



**Figure 5: Hand molded briquettes made in the laboratory at TUT.**

## **CONCLUSION**

This paper presented the processes that were followed to establish a project that would ensure sustainable economic development and job creation for the youth in South Africa using waste biomass to produce alternative source of energy that would be used for domestic cooking and space heating. The business value chain across which youth and women could be employed or where their businesses could be contracted, is also highlighted. Furthermore, the paper demonstrated that it is feasible to develop and sustain such projects if the right partnerships are established. However, the paper also indicated some of the challenges that could emerge when starting a completely new project and it further emphasized the value of partnerships as a tool to solve problems and create sound institutional arrangement for efficient business development. The next work will be on the piloting of the briquettes in the selected settlement, both urban and rural in South Africa.

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# LEARNER ABSENTEEISM IN RURAL PRIMARY SCHOOLS: WHY ARE THEIR NUMBERS INCREASING WITH TIME?

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## ABSTRACT

*This research explores learners' absenteeism in rural primary schools in selected schools in Ngaka Modiri Molema District. Participants were 65 in all comprising 13 principals, 13 teachers and 39 parents some of whom were school governing body (SGB) members. There were 31 women and 34 men with ages ranging between 21 years and 55 years ( $M = 35.4$ ;  $SD = 9.6$ ). Participants indicated their views about the causes and effects of absenteeism in rural primary schools on a Likert type scale. 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 the causes of absenteeism as (a) the lack of knowledge of the importance of education by parents (b), Heavy homework given by teachers and (c) Poverty.*

**Keywords:** Absenteeism. Rural Areas. Learners. Primary School.

## INTRODUCTION

In South Africa learner absenteeism as a challenge is covered by the South African School Act, nonetheless the Act does not necessarily define the term learner absenteeism. The Act merely provides an explanation of absenteeism in the South African school context. Learner absenteeism is a serious hindrance to effective professional practice (teaching and learning) and thus a clear definition of learner absenteeism in South African school context is called for. "Absenteeism is a habitual pattern of absence from a duty or obligation". Learner's absenteeism is defined as "temporary away from the school when his/her presence is expected." "It is also loss of days or absence from school work". "The failure of the learner to report for study when he is scheduled work". It has to be stated that absenteeism on the side of the learner can be in two forms. It may be authorized or unauthorized. Authorized absenteeism refers to absenteeism that may be authorised by the school and/or parents. The purpose of this study is to look into the reasons for absenteeism not being minimal in primary rural schools. The purpose of this study is to find out reasons for the perpetual absenteeism in these schools. However, for the most part truant students tend to spend their time away from school and home; time away from home is used to conceal absences from their parents. Truancy can take the form of fractional truancy, where students arrive late, leave early or skip individual classes. It has to be stated that there are lots of authors have their own description of truancy. According to Cunningham (2005), truancy is the absence of a student from school without the knowledge or permission of parents. The truant leaves home under the pretence of going to school but turns away and become involved in out-of-school activities. Truancy is unauthorized non-attendance. Bond (2004) included fractional truancy, which occurs when students arrive late or leave early, or spend entire days away from school. Truancy is typically defined as a certain number or certain frequency of unexcused absences as suggested by (Balfanz & Byrnes, 2012). Absenteeism may also be full or partial. Partial absenteeism may be seen in situations whereby learners come to school early in the morning and leave the school in the morning after meals are served or come to school when the school is about to knock off with the aim of taking part in the extra-mural activities. Full absence is when the learner is absent for the total day. In this study, absenteeism will mean both partial and full absenteeism. School refusal differs from truancy in that children refuse to attend school even in the face of persuasion and punitive measures from parents and school. These students stay at home with the knowledge of their parents and school administrators (McShane, Walter, & Rey, 2001). This form of absenteeism is widely

associated with social and medical disorder involving persistent non-attendance at school, excessive anxiety, and physical complaints (Australia, 2004; Bond, 2004). This type of absenteeism can be separated from the other types, given its psychological and/or medical composition. Several studies show that school refusal is an important dimension in understanding students' absenteeism (Dube & Orpinas, 2009; Kearney, 2007; McShane, Walter, & Rey, 2001). For example, Dube and Orpinas noted three reasons for students' refusal to attend school: 17.2% of their participants refused to go to school to avoid fear- or anxiety-producing situations, to escape from adverse social or evaluative situations, or to gain positive tangible rewards; 60.6% missed school to gain parental attention or receive tangible rewards (positive reinforcement); and 22.2% had no specific reason for not attending school. School withdrawal: is when children are absent from school because their parents keep them away from school on a frequent basis because of the parents' needs and priorities. For the most part, these children's parents do not enrol them at school (Australia, 2004).

## **Rural South African Background and Basis of the Study**

The constitution, the South African Schools Act and various education policy documents say that all South African learners should have access to the same quality of learning and teaching, similar facilities and equal educational opportunities. The term 'rural' is ambiguous, and distinctions between rural and urban tend to be arbitrary and varied. The primary school absenteeism is seen to be a serious contributory factor in delaying the economic advancement in rural areas. This is caused by the fact that absenteeism ultimately leads to learners quitting school therefore unskilled labour force. Rural areas are characterised by various factors that negatively influence the delivery of quality education. International literature defines 'rural' as a space where human settlement and infrastructure occupy only small patches of the landscape, and economic activity is dominated by primary production. In South Africa, however, this definition of rural has to be expanded to include areas of dense settlement created by apartheid driven land resettlement policies.

Typically, rural areas are remote and relatively underdeveloped. As a result, many rural communities and their schools are poor and disadvantaged, lacking basic infrastructure for sanitation, water, roads and other transport and electricity. In South Africa, colonialism and apartheid left an indelible print on all aspects of rural life through land disposessions, resettlement policies, and systematic exclusion from opportunities to improve personal and social well-being that made poverty the most endemic characteristic of rural areas. South Africa is divided into nine provinces with the aim of making the whole country governable. Some of these provinces are seen to be mostly urban while others are rural. Provinces with large rural communities are increasing in relation to the wealthier provinces. Also, provincial education departments have been encouraged to spend boldly on school funding norms allocations and to aggressively increase spending on capital and infrastructure. However, these measures have reduced but not eliminated inequities between historically advantaged and historically disadvantaged schools, and above all between schools in rural and urban areas. In per capita terms, it appears that spending on public schooling across provincial education departments has become more equal. There is still a need to attain equity between the rich urban and poor rural schools. Equity may nevertheless not be an attainable goal using current modes of determining provincial and Intra-provincial allocations to schools. One reason for this is that personnel budgets remain too high, constraining levels of expenditure on non-personnel, development items. The socio-economic realities of rural areas put their learners at a disadvantage to start with. Functionally illiterate and innumerate parents are mainly found in the rural areas. The apartheid past had a lot to do with the fact that these parents lacked the opportunities, development and resources that one would normally find in a more affluent community. In addition, many rural communities lack the professional help and support, governance structures, books and learning materials that they need to provide the necessary parental support and care for their children. It is against this background that this research was conducted. This background on its own paints a picture of how life is in rural South Africa.

## **Theoretical Framework**

Intermittent studies and circumstantial observations in many countries show that 'enrolled' students are frequently not in schools. These are sometimes caused by the following factors: Balfanz & Byrnes, (2012) assert illness as the major cause of student absenteeism in secondary schools. Annual colds, flu, and assorted other childhood ailments clearly contribute to school absenteeism, but they are not the origin of chronic absenteeism.

The purpose of the study was to investigate the incidence of learner absenteeism in the rural primary schools of the North West province. It is about the reasons why learners absent themselves from schools. Absenteeism is a period of time when a student does not attend school (Teasley, 2004). Learner absenteeism is a problem within school systems involving all ages and there is little evidence that attendance rates are improving (Reid, 2003). When students are absent from school there are a wide range of short term educational consequences that they face. If a child absents himself or herself that learner stands a chance of losing a lot of school work covered on that day. This means that learner absenteeism works totally against the aims of schooling since when one is absent; the whole days' school work is lost to the learner.

## **METHOD**

### **Participants**

The targeted population comprised of teachers, principals and parents from Ngaka Modiri Molema district of the North West province. The district has 128 schools including primary and high schools. So as long as parents have had a child as a learner in a primary school they were then considered as eligible for the purpose of this study. To select participants, simple random sampling was used. The first aim was to select a sample of approximately 10% of the schools in the population. The 10% was seen to be an ideal number considering that the population of 128 schools would in essence have meant that there were 2 378 eligible participants. That number of participants would be difficult to reach. In selecting the 10% of the schools a table of random numbers was used and 13 schools were finally included in the study. Specifically, each school was given a number ranging from 1 to 128. Three parents representing each school were also selected in a similar manner as the teachers. This means that the sample was made up of 65 participants, comprising 13 principals as well as 13 teachers and 39 parents. 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.

### **Instrument and procedure**

In this study both qualitative and quantitative methods of collecting data were utilized. In essence this was a mixed methods study. 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 views of participants on causes of learner absenteeism in rural primary schools.

## **RESULTS**

### **Biographical data**

Participants were 65 teachers, principals and parents. Table 2 shows the biographical data that the participants were requested to provide. It may be observed from the table that the majority of participants were men. Participants' ages ranged between 21 years and 55 years ( $M = 35.4$ ;  $SD = 9.6$ ). The table further reveals that the majority (56.9%) of the participants had completed either a diploma or a degree and higher. It is worth noticing that most of the teachers (53.8%) 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 parents, a majority (66.7%) had work experience as SGB members of 15 years or more where experience ranged between 5 years and 22 years ( $M = 14.3$  years;  $SD = 5.4$ ).

### **Views on causes of learner absenteeism in rural primary schools**

In establishing the reliability of the views about the causes of learner absenteeism in rural primary schools Cronbach's

(1951) alpha as a measure of the internal consistency of scores obtained from the scale was computed. To establish the validity of the views on causes of learner absenteeism in rural primary schools (VCLARPS) two processes were followed. First the researcher requested three academics to provide expert opinion on the scale. Second, exploratory analysis was computed where the scale scores were subjected to a principal components analysis. The researchers explained to the academics what the scale was developed for. Following this the researchers then requested the three to provide expert opinion on any issue they observed about the scale. The first recommended input was about changing the researchers' four-point scale into a five-point scale. Regarding this issue, the researcher had four rating points for the scale namely, 4 = Strongly Agree, 3 = Agree, 2 = Disagree and 1 = Strongly Disagree. The academics suggested that a fifth rating point be added. The researcher duly added the rating point named 5 = I don't know. In the original scale the researchers had divided the questions into four areas each with its heading. In doing this, the researchers thought that the questions were about (a) the lack of knowledge of the importance of education by parents, (b) Heavy homework given by teachers, (c), Poverty and Huge syllabus (d). Regarding the four areas the researchers were advised to remove these. Finally, the academics requested a change in a few item statements. After all this process, the academics certified that they were happy with the resultant scale. In this instance face validity of the scale was accepted. Content validity was further assessed through principal components analysis (PCA) which was computed with the aim of exploring the data. Firstly, a varimax rotated matrix with eigenvalues greater than unity indicated a five factor solution. This solution had a total explained variance of 68.1%. However, an inspection of the resultant components for the five factors did not make theoretical sense. The three factors had eigenvalues of 3.71, 2.67 and 1.93 respectively as well as accounted for 51.95% of the variability in the scores. It has been suggested that researchers should run reliability tests on all resultant factors before using them in subsequent analyses (Reynaldo & Santos, 1999). It was on this basis that a test of the internal consistency of the scores from each of the three factors was determined. The internal consistency scores of Factor 1 was .78 [95% CI:  $\alpha = .69 - \alpha = .85$ ], for Factor 2 it was .72 [95% CI:  $\alpha = .61 - \alpha = .81$ ] and for Factor 3 it was .69 [95% CI:  $\alpha = .57 - \alpha = .79$ ]. So in essence the three factors were found to be fair and acceptable (Cicchetti, 1994). Because the three factor solution had reliable scores from the scale, content validity was also accepted based on findings of the exploratory analysis.

## Views about causes of learner absenteeism in rural primary schools

An inspection of the items from principal components analysis led the researchers into naming the factors in terms of the principal as: *lack of knowledge of the importance of education by parents* (Factor 1, six items), *a heavy homework given by educators* (Factor 2, five items) and *poverty* (Factor 3, five items) of project management activities. The analysis of the views about the causes of learner absenteeism in rural primary schools, were based on the three established factors.

## Lack of knowledge of the importance of education by parents

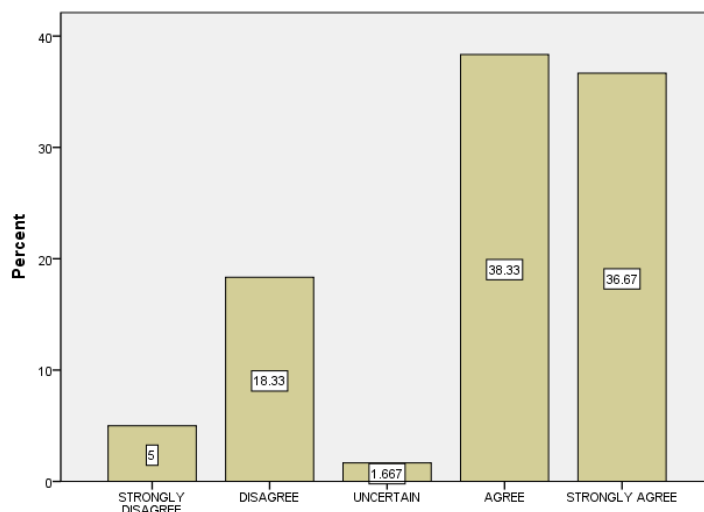
The measures of central tendency and the standard deviations of the items statement relating to the lack of knowledge of the importance of education by parents. The table demonstrated that the responses were consistently clustering around a score of four. In all the six item statements, a majority of participants agreed or strongly agreed that there was a lack of knowledge of the importance of education by parents. As an illustration of this contention, the figures provides a rating of the item statement: learners feel that they are given a lot of work by educators). It was observable from the figures that 86.7% were of the view that parents were not positively involved in the education of their children. It was also seen that the measures of central tendency and the standard deviations of the items statement relating to heavy homework given by educators as a basis of learner absenteeism in rural primary schools. Similarly, as in the previous instance it was shown that the measures of central tendency were around a score of four. In all the five item statements, a majority of participants indicated that they agreed or strongly agreed that poverty was the main reason for learner absenteeism.

Measures of central tendency and standard deviations relating to the five items of heavy homework given by educators that are seen to be a cause for learner absenteeism in rural primary schools the table presented the measures of central tendency and the standard deviations of the items statement relating to poverty as a cause of learner absenteeism in rural primary school. The table also showed that the responses were consistently clustering around a



score of four. In all the five item statements, a majority of participants agreed or strongly agreed that poverty was the cause of absenteeism in rural primary schools.

Measures of central tendency and standard deviations relating to the five items of poverty as a cause of rural primary school absence. As an illustration of this view, Figure 5 provides a rating of the item statement: Lack of finance to purchase the required books, pens and pencils. It is observable from the figure that 75.0% were of the view that poverty was a cause of learner absenteeism.



**Figure 1: Percentage distributions of participants on an item about poverty as a cause of learner absenteeism in rural primary schools.**

## DISCUSSION

The interviewees were asked, “What are the causes of learner absenteeism in rural primary schools?” Here the interviewees saw the principal as an ideal person to manage school projects on two accounts. In the first argument the interviewees indicated parents of learners were seen to be not interested in their children’s education. It was like parents were not aware of the importance of education the lives of their children. The second argument was based on the work load of learners. Respondents felt that educators expected a lot from learners. Excerpts from the interviews illustrate this. For example Respondent 6 answered the question by stating: “...our children are given a lot of work that they don’t know...my son cannot even go out and play after school due to the amount of homework given to him by the educator”. These sentiments were supported by Respondent 16 who indicated that “...educators punish our children if they do not submit the work on time, as a result our children do not feel like going to school anymore”. Respondent 37 sentiments by stating that: “...since we live in rural areas there is no means of transport, our learners travel for long distances and arrive home late and tired, there are even stories of bullying on their road from school to home, this, I believe is what makes my daughter not to attend school”. Another dimension that came out mostly in the interviews was the issue of poverty. This was highlighted by most respondents. On this issue Respondent 47 stated “...our children come from a disadvantaged background, there are a lot of economic issues that discourage learners from going to school issues like lack of shoes, distance from school, corporal punishment, no pocket money and Lack of parent guidance to solve the educational doubts”. One respondent on the issue of poverty indicated that most of the parents in rural areas did not have employment. This was due to the fact that they did not have identity documents. Given the above, researchers are of the view that this challenges needs a response from not only the department of basic education but also from department of social welfare. It is therefore recommended that schools should be places of happiness so as to entice learners not to be absent. The department of Home affairs should go to the people in rural areas to help them acquire identity documents. The Department of Basic Education (DoBE) has to enforce its rules that are against corporal punishment and the department of transport should provide school transport for learners in rural areas.

## Limitations

It has to be stated that even if the sample of this study was randomly selected, the results presented here are mindful of the fact that schools may be in the same province but conditions in those schools cannot be the same. With hindsight the researchers feel that it would have added value to have interviewed the primary school learners. The researchers acknowledge this as a limitation because interviews may have illustrated what learners exactly meant in reporting that... *schools are hell* ...for example. It is worth pointing out that absenteeism in primary school is a vast field of study on its own hence this paper may not be seen as comprehensive in any way.

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# BRINGING WOMEN IN: GENDER IMBALANCES IN THE SOUTH AFRICAN ENGINEERING SECTOR

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## ABSTRACT

*Although in the last two decades there has been growth of women in middle management, the numbers of CEOs that are women is still extremely low in large corporations. The under-representation of women – especially black women – in engineering around the world continues to be a great challenge. In South Africa, it has been almost 25 years since democracy, and the underrepresentation of women in engineering and particularly black women is still a great challenge. In most countries, there are few senior women engineers in managerial positions. In South Africa and globally, women are underrepresented on the corporate boards of STEM fields sectors.*

**Keywords:** CEOs, women, barriers, management, engineering profession.

## INTRODUCTION

“About the single most uncontroversial, incontrovertible statement to make about women in management is that there are a few of them” (Adler, 1993:1). The representation of women and black people tend to be more limited in the upper echelons of management than it is in lower-level management (Shenhav, 1992). Although there has been growth of women in middle management, the numbers of CEOs that are women is still extremely low in large corporations (Adams & Kirchmaier, 2016; Oakley, 2000). Women are underrepresented on the corporate boards of Science, technology, engineering, and mathematics (STEM) fields (Adams & Kirchmaier, 2016). According to Adams and Kirchmaier (2016) there may be biases or impediments present that make it harder for women to achieve leadership positions in STEM fields. In South Africa, women are underrepresented in “high levels of career paths in both academic and non-academic settings” (Mlambo & Mabokela, 2017:272). Also, women engineers face a series of gender-related barriers to success in this male-dominated profession (Du Toit & Roodte, 2009). To understand the biases, barriers or impediments, it is therefore imperative to understand the South African engineering profession and its culture around the empowerment of women. Also, how South African legislations has played a role thus far in empowering women.

This paper covers the South African Engineering profession, the history of the women engineers in the profession and also the culture of the profession. It further discusses the successes and the failures of the employment equity act, women in management in South Africa and also the impediments that hinder women to grow into top management positions. It further highlights the statistics that show the underrepresentation of women, then it further ends with a conclusion and some recommendations regarding the employment equity act in South Africa, the culture and the issue of sexism around women in the engineering profession in South Africa.

## The Engineering Profession in South Africa

In South Africa, the engineering profession is regulated by the Engineering Council of South Africa (ECSA) as a statutory body established under the Engineering Profession Act, No. 46 of 2000. It is the body that registers professional engineers in South Africa. Its function is to protect public interests and engineering activities in South Africa and is responsible for ensuring that the interests of the profession are promoted (Du Toit & Roodte, 2009; Mathe & Holding, 2014). Statutory councils are important in South Africa because only those who are registered with

the councils are allowed to perform work in their specific professions (Bowen et al., 2013). This is achieved through various societies that the ECSA recognises, such as the South African Institution of Chemical Engineers. Although professional registration with the ECSA is still voluntary, there are considerations to make it compulsory (Du Toit & Roodte, 2009). In the sub-Saharan Africa countries, the Engineering Council of South Africa is the only professional engineering body that keeps employment records and is well organized and regulated (Mohamedbhai, 2014).

Professional engineers' work place has changed over the last two decades due to globalization, global mobility and free trade. Engineers work globally, and they need to have hard and soft skills as a new engineering criterion that help them to work globally. The Accreditation Board for Engineering and technology in the USA started voluntarily, the process of accreditation and quality assurance in engineering. Similarly, those accreditation process has been replicated in South Africa by ECSA to accommodate the changes caused by globalization (Patil, 2005).

History is imperative because 'one cannot develop an identity, a consciousness, an understanding or a philosophy without an historical awareness or background knowledge of the events and people who contributed to the development' (Sperotto, 2015). In 1945, there were no women in the engineering field in South Africa. Only in 1974 did women gradually start to participate in the engineering profession. In 1996, only about 16.25% who participated in the labour market were women; however, in 2005 this trend decreased to 10.51% (Du Toit & Roodte, 2008; Du Toit & Roodte, 2009). According to the ECSA's National Engineering Skills Survey report (April 2014), in 2014 women comprised 12.1% of the engineering profession. Over nine years, the growth of women in engineering was 1.59%. Although there has thus been very slight growth, this trend shows that women are still under-represented in the engineering profession.

"In the 2016/2017 financial year, there were 49 304 registered persons. At the end of the 2017/2018 financial year, the numbers were at 52 557, which shows an upward trajectory of 6.6% in the database of registered engineering practitioners" (CEE Report 2017/2018:83).

**Table 1: Professional Category Registration Statistics**

Professional Engineer						
		Total registrations	New registrations	Transferred from Candidate	Cancellation	Refusals
Total Registered		17226	490	235	123	115
Gender	Male	16213	405	189	119	101
	Female	1013	85	46	4	14
Race	Blacks	1985	165	80	2	52
	Whites	13903	256	120	117	48
	Asian	1144	62	31	2	14
	Coloured	194	7	4	2	1

**Source: ECSA Annual report (2017/2018:84-85)**

Table 1 shows that the total registered Engineers are 17226 in total and of this total the highest are the registered Professional Engineers and that the highest total in this category are whites and in all the other categories except for the Professional Engineering Technician and although women are in number of registrations, they are still underrepresented.

## Employment Equity Act-Successes and Failures

All policies that have been introduced in post-apartheid South Africa have been implemented as mechanisms to facilitate change (Bowen et al., 2013). In the history of South Africa, the post-apartheid period is the most positive

legislation period for women (English & Le Jeuns, 2012). The employment equity act is one of the positive legislations that has been implemented. The aim of the Employment Equity Act is to redress the legacies of apartheid in the South African workplace (Horwitz & Jain, 2011; Thomas, 2002). It achieves this by promoting equal opportunity and the elimination of unfair discrimination through affirmative implementation. Its aim is to ensure that people from designated groups who are defined in the Act as black people, women and people with disabilities are equitably represented (Jain, Horwitz & Wilkin, 2012; Thomas, 2002; Thomas & Jain, 2004).

The implementation of employment equity act has had its challenges in various industries. In the mining industry for instance transformation through employment equity has partially failed and has not met the Mining charter's employment equity targets. The partial failures have attributed to the following factors among others, inadequate individual development support, failure in transformation planning, failure to achieve engineering competence certificates, institutionalised prejudices of the past and the lack of management commitment (Schoeman, 2010). It has been 19 years in South Africa since the employment equity act has been introduced and according to the 18<sup>th</sup> report of the Commission of Employment Equity from the department of labour in South Africa, the is still non-compliance by 50 JSE companies, Whites continue to dominate top management positions, in top management by population, White people occupy 67.7% of top management positions. In senior management, on the CEE report, on senior management by gender category, males occupy 66.2% of the positions and whites occupy 56.1%. While females only occupy 33.8%.

**Table 2:** Comparisons of occupational levels by period

OCCUPATIONAL LEVEL	PERIOD	WHITE	AFRICAN	COLOURED	INDIAN	MALE	FEMALE
<b>Top Management</b>	2001	87%	6%	3%	4%	87%	13%
	2017	67%	14.3%	5.1%	9.4%	77.1%	22.9%
<b>Senior Management</b>	2001	81%	9%	5%	5%	80%	20%
	2017	56.1%	22.1%	7.7%	10.9%	66.2%	33.8%
<b>Professionally Qualified</b>	2001	56%	33%	6%	5%	62%	38%
	2017	36.5%	42.2%	9.6%	8.8%	53.4%	46.6%
<b>Technical Skilled</b>	2001	18%	58%	18%	6%	60%	40%
	2017	19.6%	61.7%	11.3%	5.6%	52.9%	47.1%

Source: CEE Report (2017/2018:3)

As there has been partial failures, there has also been successes that have been achieved in labour transformation through the employment equity act and this is depicted in table 4 below. Figure 4 shows that there has been progress in achieving employment equity targets although it's still at a very low pace. These successes for instance are in the Mining industry, and are attributed to these factors among others, commitment by CEO, Individual development support, transformation plan, succession planning. Communication and transparency.

In terms of the Engineering profession, Men are still dominating the profession in all categories and in terms of race whites are still dominating all categories, except the Professional Engineering Technician category.

**Table 3:** Professional Registration Statistics by Gender and Category

Professional Engineer	Male	Female
Professional Engineer	16213	1013
Professional Engineering Technologist	5278	428
Professional Certified Engineer	976	7
Professional Engineer Technician	4355	804

Source: ECSA Annual report (2017/2018:84)

**Table 4:** Professional Registration statistics by Race and Category

Category	Black	White	Asian	Coloured
Professional Engineer	1985	13903	1144	194
Professional Engineering Technologist	1729	3219	544	214
Professional Certified Engineer	71	857	42	13
Professional Engineering Technician	2646	2017	293	203

Source: ECSA Annual report (2017/2018:86)

## **Patriarchy, Culture and Sexism within the Engineering Profession**

Patriarchy is a system that comprises of a powerful social power. Most corporations are patriarchy systems. It is defined as “a system of social power, shaping cultural categories and personal identities extending through male dominance enveloped in an ideology of control, protection and benevolence, not just vis-a vis women but also men” (Davis, McGregor, Pringle & Giddings, 2018:625). Patriarchy as a key powerful structure influences everyday life and this is demonstrated by the Other’s three model, the first way is that power that is exerted by patriarchal figures, second way is through man’s homosocial, yet heterosexual groupings and the third way is by delimiting of women (Davies et al, 2018). Patriarchy is mostly present in male dominated environments and because engineering is a male dominated environment, then women engineers are bound to experience this system of social power.

Dryburgh (1999) confirms that each profession has a unique culture that has certain values and norms. Green (2005) defines workplace culture as a dynamic process of social interaction and signaling that both constitutes and is constituted by individuals who engage in it. The author further mentions that culture in the workplace has social relations that define behavioural expectations for the job, such as those for diverse styles of interactions, conversation boundaries, modes of dress or appearance signals, and day-to-day displays of competence. The engineering field traditionally holds a professional ideology that emphasises ‘technical expertise and mathematical ability’ (Kirn et al., 2016:5). The profession is plagued by sexist attitudes and a crisis of gender imbalance (Dryburgh, 1999).

Engineering is believed to have a deeply rooted normative culture that emphasises a highly technical nature, masculine strengths and a fascination with technology (Dryburgh, 1999; Kirn et al., 2016; Ponell, Bagihole & Dainty, 2006). The culture is predominately monolithic and powerful, which can lead to the isolation of those who do not have normative values (Kirn et al., 2016). These characteristics might also explain why women find it hard to remain in engineering. Bastalich, Franzway, Gill, Mills and Sharp (2007) support this argument that engineering culture is aggressive in its displays of technical competence and competitive self-promotion. The problem is thus that engineering culture is set on masculine norms and is intolerant of diversity. Bastalich et al. (2007) argue that it is imperative for workplace culture to change within and beyond engineering workplaces and engineering university faculties. In South Africa, the engineering culture or work environment is that it is a male dominated world (Mlambo & Mabokela, 2017). Male dominated culture which is “Male dominant”, “Dirty, loud, confrontational”, “Very macho culture”, “Discrimination and sexism”, “Antiqued in Africa” (English & Le Jeune, 2012:150). Although it has changed in the past 10 years, in some sectors transformation is still needed to accommodate women.

Powell and Sang (2015:922) refers to sexism as a “non-violent sexism experienced in everyday interactions”. There are different types of sexism, hostile and benevolent sexism. Hostile sexism is the type where women are characterized as incompetent and makes them feel that the environment is male dominated and sexual hostility. This is the type of sexism that women in STEM fields experience in their work environments (Reilly, Rackley & Awad, 2016).

## Statistics of Women in Engineering Management

In most countries, there are few senior women engineers in managerial positions, and since 1988 there has been a decrease in this number (Hersh, 2000). The representation of women and black people tend to be more limited in the upper echelons of management than it is in lower-level management (Shenhav, 1992).

Engineering and management within the field have been viewed as careers for men (Bass & Avolio, 1994; Evetts, 1998). Are women and men different in terms of their managerial and leadership skills? Eagly and Johnson (1990) argue that the view that women lead the same way as men must be reviewed because women lead in an interpersonally orientated way, and men lead in a task-orientated way. However, Oshagbemi and Gill (2003) contend that, according to the study they conducted that examined the leadership styles and behaviour of UK managers, there are no significant statistical differences in the overall leadership styles between male and female managers.

In the engineering field in South Africa, there is a serious shortage of managers. Engineers who have acquired their B.Sc (Eng). The Engineers that have the B.Sc(Eng). are the ones who have progressed to managerial positions faster.

According to Du Toit and Roodte (2008:18-19) in terms of the Distribution of managers with engineering-related qualifications according to race, 1997–2005, in 1997 whites were on 95,74% and blacks on 4.26%, in 2005 Whites were on 76.65% and blacks were 21.35% and also in the Distribution of managers with engineering-related qualifications according to gender, 1997–2005, in 1997 men were 95.56% and women were 4.44%. In 2005 men were 85.53% and women were 14.47%.

## Impediments for Women Progression in Management

Although in recent years there has been some hiring of female CEOs, these appointments seem exceptions rather than the norm. The underrepresentation of women in top management jobs is exuberated by several barriers. These barriers prevent them to moving up the corporate ladder. Often, the barriers are categorized as glass ceiling and glass cliff effect. The other factors among others that impede women in management's progress includes "motherhood that results in career interruptions, a lack of a role model or a conscious decision to avoid the stress of balancing work and life" (Hurley & Choudhary, 2016).

Regardless of whether in academia, engineering firms, or the private or public sector, women who work in STEM fields experience barriers that hinder their progress. These barriers belong to two identified categories: professional and psychological. These were identified in a study by Maskell-Prez and Hopkins (1997) that was conducted in an engineering firm. Within these two categories are further sub-barriers. Those under the professional category include a lack of advancement, mentoring and training opportunities, whereas the psychological category includes issues related to work expectations, sexual discrimination and balancing family with work (Maskell-Prez & Hopkins, 1997).

Maskell-Prez and Hopkins (1997) argued that these barriers contribute to the low retention of women engineers and they also cause career-progression limitations and job-related psychological stress. Women in STEM-field faculties in colleges and universities are also plagued by cultural and structural barriers, which has led to men being over-represented in high-ranking roles and leadership positions. These barriers have been identified as cognitive bias, gender inequality, denial of voice, and exclusion from social networks and information (Glass & Minnotte, 2010).

Rosser (2004:50) mentions that 'in January 2001 a statement released on behalf of the most prestigious U.S. research universities, administrators suggested that institutional barriers also have prevented women scientists and engineers from having a level playing field in their professions'. These institutional barriers were identified as male-dominated labs, practices and departmental cultures; balancing career and family; gender stereotypes; and overt discrimination or harassment. For women engineering students, stereotype threat seems to be a concern (Cadaret, Hartung, Subich & Weigold, 2017; Grimes & Mohammadi-Aragh, 2017).



In South Africa, there are also barriers that hinder women engineers in the workplace. These include discrimination, lack of work–life balance (work vs family), lack of mentors, lack of access to networks, lack of recognition and credibility from male peers, and inequality in salaries and promotion opportunities. These barriers are similar to what is experienced in other developed countries, such as the US. It is evident that social and institutional structures and barriers are hindrances to women’s entry to the field and are not due to inefficiencies originating from women themselves (Du Toit & Roodte, 2009). Therefore, it is probable that the poor retention and lack of growth of women engineers are caused by barriers that they encounter in their workplaces. The statistics below show that in top and senior management in both government and the private sector women are underrepresented as per the CEE 18<sup>th</sup> report- 2017/2018. According to the CEE 18<sup>th</sup> report (2017/2018:20-24), both the Private and Government sectors employ more Males than Females at Top Management Level. It also shows the representation of females to be below their Economically Active Population (EAP) in both Private and Government Sectors at this occupational level. In government males are 67.4% and in the private sector they are 78.4% females in government are 32.6% and in the private sector they are 21.6%. The Private sector is still lagging in the representation of Females in this level. In Senior Management by gender in government and private sector, males in the government sector are on 61.0%, in the private sector are on 67.7%. Females in government are 39.0%, and on the private sector are on 32.3%. Both government and private sector are male dominated.

## CONCLUSIONS AND RECOMMENDATIONS

Women in top, senior and middle management are underrepresented in the private and government sectors. It is also clear that they are faced with barriers that hinder their corporate ladder progress. Change is inevitable for women to be able to participate and grow in STEM fields and therefore the following recommendations are recommended:

The first recommendation is that industries are less tolerant of overt sexism in the workplace by management (Gale,1994), so why should sexism be tolerated by male dominated industries. Second recommendation is that the employment equity act must be reviewed in terms of its purpose and to redefine this purpose in a way that it would work for all in South Africa. The third recommendation is that, conformity with workplace culture determines one’s success within that environment. As a result, it is important to understand the culture of an organisation before joining it (Kitchin, 2010). However, women do not always have to assimilate into an organisation’s culture, organisations must instead strive to be structured to accommodate women.

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# ROLE OF SOCIAL ENTREPRENEURS IN PROMOTING NON-PROFIT ORGANISATIONS: A STUDY OF SOCIAL ENTREPRENEURSHIP INITIATIVES IN TAMIL NADU AND LONDON (UK)

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## ABSTRACT

*Social entrepreneurs are capable enough to sustain themselves through innovative solutions. Social trade agents created a pathway to promote nonprofit sectors to tackle the social issues without aiming for profit or wealth creation. This paper aims to discuss the facilitating factors and contributions made by social entrepreneurs in promoting nonprofit organizations. This author did a comparative case study of Social entrepreneur's initiatives in Tamil Nadu (India) and London (England). The author attempted to resolve a myth about social enterprises are not for profit organizations and not conscious about internationalization, however due to page limit only key points are discussed in this paper.*

**Keywords:** Social enterprise, nonprofit organizations, social objectives, Social Entrepreneurs and Social trade agents

## INTRODUCTION

*Social entrepreneurs are determined to establish a social value by acting as a facilitators of social changes and also sustain themselves through innovation and self-efficacy. The impacts created by such social change agents are inevitable. There is an increasing interest among the academicians, researchers and even the public about the role of social entrepreneurs in promoting Social enterprises. However, their interest towards social promotion to achieve social objectives are confused with not for profit organizations. The social entrepreneurs possess the capacity to mobilise the resources and internationalise without forgetting to add social value (Alonso, Kok, & O'Brien, 2019). The author aims to discuss the role played by such social entrepreneurs in promoting nonprofit organisations by comparing the first generation social entrepreneur's initiatives in Tamil Nadu (India) and London (England).*

## PROBLEM STATEMENT

There is a recent shift among the world to focus from wealth creation to more of social provision, which allows the social entrepreneurs to emerge Bonwick, M. (2014). Not for profit organisations finds new ways of attracting the government offerings or rely upon donors, however carry out the mission of reinvesting their surplus for social causes... "Social entrepreneurs engaged in community development and add value to the society by promoting social enterprises. Social entrepreneurs also possess the same characteristics like commercial entrepreneurs. Their main agenda is value creation not wealth creation. Social Entrepreneurs engaged in capacity building programme through their NGO's. McNeill, J. (2011). Social Enterprises are not the same as Not for profit organisations and are usually misplaced and needs to be clarified.

What are the facilitating factors and the role of social entrepreneurs in promoting social enterprises or nonprofit organisations in Tamil Nadu (India) and London (England)?  
How social enterprises are different from not for profit organisations?

Objectives:

To explore the role of social entrepreneurs in promoting nonprofit organisations.

To differentiate social enterprises and not for profit organisation

## LITERATURE REVIEW

Social entrepreneurs role is crucial in are promoting their enterprises due to a paradigm shift from wealth creation to social value creation. The concept of social entrepreneurship is misspelled with not for a profit organisations. The not for profit organisations reinvest their surplus into the society, However they achieve the objectives .It is governed by the board of members or a group of individuals as an entity. Because of this, there is a need to clarify the concept of "Social Entrepreneurship, which has two dual traits namely opportunity recognition and social promotion by innovation for sustainability and also through self-efficacy (Abu H Ayob 2018).

The literature review is categorised into three sections due to the restricted number of pages (Manuscript guidelines). The first section is about Social entrepreneurship and the role of social entrepreneurs in promoting nonprofit organisations. The final section is about clarifying the similarities between nonprofit and not for profit organisations. Social entrepreneurship emerge out of entrepreneurship, however, it is important to clarify the concept of entrepreneurship before explaining the concept of social entrepreneurship.. Drucker P (1985) defines an entrepreneur as someone who continues to look for change and someone who uses opportunities in the environment. Arguably, an entrepreneur is one who actively engaged in producing greater output and achieves higher profitability. (Nicholls, 2010)Therefore, the researcher believes that it is imperative to find a suitable surviving climate. Without that the social entrepreneurship culture cannot be promoted or nurture, however there are some exemptions where the social entrepreneurs and their enterprises create a suitable climate Such environment can be promoted by innovation and growths in which the social entrepreneurs can use those opportunities to embark their journey. This is possible by identifying a suitable social solution to any issues that bothers the climate or the environment. It could be in their home country or any part of the world. Social entrepreneurs can add social value by creating sustainable entrepreneurial activity without expecting a profit. They are also known as service organisations and different from commercial organisations. The concepts of social entrepreneurship not only gained an attention from a national perspective but also from an international perspective. There are international social entrepreneurs who establish themselves not only in their own country but also at an international level. Their ability to rapidly internationalise and the strategy they adopt are similar as similar as commercial entrepreneurs (Alarifi, Kromidha and Robson, 2019). However, it leaves confusion or raises a question, how social entrepreneurs can internationalise their enterprises when their main motive is not profit? International firms can adopt inorganic growth to go global or internationalise their firms to take advantage of foreign locations through networking and through the support of knowledge gatekeepers (Oviatt, B. M., & McDougall, P. P. (2005).

This is applicable to any born global firms whose aim is to go global or internationalise their firms from the very beginning. Social entrepreneurs who seize to expand their enterprises and achieve the social cause without aiming for profit. , Not for profit organisations, where profit is incidental can expand their entrepreneurial activity through inorganic growth such as networking with the likeminded organisations

They start their initiative with the support of Government or any funding agencies and continue to achieve their social objectives (Misagh Tasavori, Caleb Kwong & Sarika Pruthi 2018). For example Muhammed Yunus and Grammen bank won the Nobel Prize in the year 2006 for their efforts to create economic and social development in Bangladesh. Yet his concept is widely accepted to promote not –for profit organisations throughout the world .Social entrepreneurs are the one who flourish the grass root movements in which they provide innovative solutions to society despite the resistance they face in their national and international markets (Yujuico 2008a). Their ability to sustain himself or herself without the support of philanthropist or sponsorship makes them unique. Jamie Oliver received an award the 'Social Enterprise Mark' for his (Fifteen) restaurant and known for his foundation in supporting underprivileged youth. .Commercial entrepreneur's aim is to create wealth by maximizing the profit and they have a sense of responsibility towards society, which they will be executing through various events (Austin, J., S. Howard, and W. -S. Jane 2006). They engaged in philanthropically activity and produce a product or provide a service to fulfil

their responsibilities towards the society and also towards their customers. Most commercial enterprises fulfill their corporate social responsibility by practicing equality and diversity; support a cause for a period etc. However, their success is highly determined by the wealth or financial success. On the other hand, social entrepreneurs driven by social impact, adding social value where the resource mobilized and reinvested into the business rather than profit or wealth creation (Boschee, Jerr & McClurg, James 2003).

In India social entrepreneurship are well-thought-out as the third sector or nonprofit sector, is very active currently. These entities vary from Location to location and activities to activities. Irrespective of the challenges it faces, it elucidates the impact on the society (Singh, Neeti. (2015). According to (Koponen, 2012) the relationship between social enterprises and other stake holders will eradicate the poverty and provide proven solutions to the development of nation's economic system. It could be possible by starting enterprises that support to alleviate the poverty through trading activities and not aimed at wealth creation. Though the statistics showed, more than 62,000 social enterprises are widely accepted why the number of social issues that needs to be addressed such as homelessness, crime rate and attack against disadvantaged sections of the society in the developed country like U.K increasing over the past decades. The recent statistics shows the number of rough sleepers increased by 13% and out of that 14% were women, and 6% were aged 25 years or under, compared to 8% in 2017 (assets.publishing.service.gov.uk, 2019). The number of crime rate increased to 96,444 in March 2019.( <https://www.ukcrimestats.com/Subdivisions/GLA/2247/>). I believe there is an undeviating implication for practitioners and researchers to recognise suitable evidence to construct the term social entrepreneurship, not for profit, voluntary sector to establish and elucidate clear definitions and involvement of social entrepreneurs known as social agents. The table below shows the difference between Social enterprises and not for profit organisations.

## RESEARCH METHODOLOGY

This study is conducted among 10 social entrepreneurs five from Tamil Nadu (India) and five London (England) .The researchers classified the social entrepreneurs under four categories such as health, education, environment, training and development to facilitate the study.

- Health: Social Enterprises which are promoted to tackle the health issues which could be physical and emotional wellbeing of the society:
- Education: Enterprises which are established to tackle the social issue by providing education
- Environment: Enterprises supports or provide solutions to environmental issues.
- Training and Development. Social enterprise provides Entrepreneurship Skill development programme to train women or people who are less privileged in the society to tackle the issue of employability.

The author first conducted a pilot study to identify the comfort level of social entrepreneurs .When the researcher received the feedback from the entrepreneurs and from the research supervisor; the researcher improved the interview and proceeded with the data collection. The researcher chose a new technique by having an informal conversation in the beginning and eventually started asking questions. This help the researcher to identify the challenges faced by the social entrepreneurs, impact created and strategies adopted to promote and sustain those not for profit organisations. Focused Group Discussion (FGD) is particularly used to derive the opinion, beliefs and attitudes of a product or service (Henderson, (2009) p.116-119).

## ANALYSIS FINDINGS AND DISCUSSIONS

The case studies of the social Entrepreneurship analyzed to understand the demographic profile, challenges faced in their respective fields, opportunities to exhibit entrepreneurial competencies and the strategies adopted to address the challenges in select situations as expressed by them. The findings draw suitable suggestions and recommendations to the different stakeholders concerned with the Social Entrepreneurship. Social enterprise needs to establish an effective organizational structure like the commercial enterprises. Commercial ventures despite their sizes whether able to succeed with certainty due to proper planning which emerges due to effective organisational structure. Most nonprofit organisations unable to adopt an organisational structure due to lack of leadership skills and also financial constraints.

The Social entrepreneurs especially women social entrepreneurs whether in India and in London were unable to access to resources due to lack of networking. Though there are platforms for commercial entrepreneurs, only few organisations, from these social entrepreneurs. Because of this, some social entrepreneurs get demotivated quickly especially if they are in the process of setting up or in their initial stage of their nonprofit enterprises; .So networking is a key to overcome such obstacles (Galaskiewicz, J., Bielefeld, W., & Dowell, M. 2006). There is a recent shift among the directors of NGO's to act as a commercial organisation especially when their enterprises are going through a saturation or maturity stage. Chinna Pillai who is a part of Kalanchiyam foundation who never crossed secondary education clearly indicated that there is a need for financial and legal education for social entrepreneurs to prevent them from moving to for profit organisations. There is a need for Government interventions to promote stability and social sustainability of not for profit organisations. Some enterprises emerge out of necessity even though the climate was not favourable for them. Opportunities provided by the government will encourage the social enterprises to sustain themselves using various effective methods. Social entrepreneurial organisations needs social change agents who can create such impact. Chowdhury (2007). Facilitating factors are the factors that promote the growth of social entrepreneurs. The author listed few factors in this research paper. An entrepreneur needs to have a sense of direction and able to influence others while catering to the needs of the business. Such qualities found in social entrepreneurs whether they are national or international social entrepreneurs. They can also cooperate to collaborate with their stakeholders to provide innovative solutions to the social problems like other entrepreneurs. Passion combined with compassion are the main facilitating factors that motivated such entrepreneurs as they are unable to neglect such social issues in the environment.

## **MANAGERIAL IMPLICATION AND FUTURE RESEARCH**

### **Social entrepreneurial Cluster**

Forming a not for profit cluster or develop a partnership between not for profit and Social enterprise as both the entities need an environment to thrive especially the financial facilitation. The Government should take as step forward to support such entrepreneurial collaboration. This is achieved by collaboration between the commercial entrepreneurs and not for profit organisations as they can form an affiliation. Centre for entrepreneurship is a non-profit organisation yet created a separate board for their ITIC (Information Technology incubator centre) where it is separately acting as a not for profit. Financial Institutions can come forward by providing a collaboration to educate the public, parents who wants to start up a social enterprise. The British government and the Indian Government can collaborate with one another to bring policies that will support the social entrepreneurs of both the nations to promote the wellbeing of social entrepreneurs.

By conducting an international event /workshops/training programme. Mr Berlin from Russ foundation is currently providing an internship programme for anyone who wants to come to Tamil Nadu (India) from U.K to share his best practices about his social enterprises. Social entrepreneurs as ambassadors: The social entrepreneurs from both India and U.K can acts as ambassadors of social changes through exchange programmes, ideas to work for the wider development of the community. Social enterprises can acts as a platform to develop or establish a relationship between funding agencies and the community engagement practitioners. The Government can promote eco-tourism projects in which social entrepreneurs can supply products made out of recycling materials. A study conducted among homeless people to reduce the homelessness in U.K though education, training and development. . A further study can be conducted to identify the pitfalls of not for profit organisations and how sick units be rehabilitated by the social enterprises or the not for profit organisations?

## **CONCLUSION AND LESSONS LEARNT**

Social entrepreneurs promote social enterprise or nonprofit organisations and they have the capacity to mobilise resources without striving to create wealth. A comparative case study method is used and the author interviewed 20 social entrepreneurs. The literature answered the research question by differentiating between nonprofit and not for profit organisations to break the myth. Through the literature, the author is able to highlight how social entrepreneurs



can also internationalize the firm without deviating from their social cause through inorganic growth mainly by networking with the similar enterprise in other countries. . Age, sex and our background is not a hindrance for anyone who wishes to start this noble journey. One should have a passion, compassion and a social motive and that will open the doors to succeed. The social entrepreneurs in London or in Tamil Nadu have some common characteristics that determination, self-efficacy, has a vision for a crime free, debt free society where people should be taught how to catch the fish and not to be fed every day. These social entrepreneurs has'' one vision for the one world.''

## TABLES AND FIGURES

**Table 1: Difference between Social enterprises and not for profit organisations.**

Social enterprises	Not for profit organisation
<p>Non-government organisations or non-profit organisations formed by an individual or by a group of people who has a passion, vision and mission to serve the society integrated with the entrepreneurial activity.</p> <p>Social entrepreneurs have greater control over their own charitable trust or cooperative society or social enterprises.</p> <p>Scope is wide for not for profit organisations</p>	<p>The main existence of not for profit organisations is not for profit and it will not pay dividends to the owners, however it will accomplish the organisational objectives. Example Transport for London invests its profit back into the business (Gerald Crompton &amp; Robert Jupe 2007).</p> <p>Not for Profit Organizations includes clubs and association of persons (keydifferences.com 2019).</p> <p>It is less for not for profit organisations.</p>
<p>These organisations main purpose of existence is to work for the development and welfare of the society and do not affiliate or identify himself or herself with the Government or public sector. However; these organisations can sometime acts as not for profit organisations (Edward N. Gamble &amp; Peter W. Moroz 2014).</p> <p>Example CED (Centre for entrepreneurship Development.</p>	<p>Not for profit organisation is not a separate legal entity</p>

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# CORPORATE WEBSITES AS STAKEHOLDER COMMUNICATION CHANNEL: A COMPARISON OF JSE-LISTED COMPANIES' WEBSITES OVER TIME

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## ABSTRACT

*Between 2012 and 2015, increases in bandwidth in South Africa and implementation of the International <IR> Framework created incentives for corporate disclosure behaviour to change. Using unique longitudinal data, this study examined whether 58 JSE-listed companies improved their corporate websites as stakeholder communication channels. The results indicate that although the use of technical features improved, and extra content were provided, financial reports were increasingly dominated by PDF formats with a decrease in the provisioning of HTML reports from prior levels. The study's contribution is that it provides some evidence that technology may be an enabler of general website usability, but not necessarily for financial reports. HTML financial reporting might suffer from 'negative' mimetic isomorphism. This paper opens up avenues for further research into underlying reasons for temporal changes in corporate disclosure practices.*

**Keywords:** Corporate websites, disclosure, bandwidth, isomorphism, JSE.

## INTRODUCTION

Just over 30 years ago, the World Wide Web (WWW) was born with an idea by Tim Berners-Lee to create a large hypertext database with typed links. Within ten years since the inception of the WWW, a new body of research emerged – attempting to understand companies' use of their corporate website as communication channel with investors. Initially (early 1990s) companies merely established some web presence, primarily aimed at customers (Stage I as described by Hedlin, 1999). According to Hedlin's model, Stage II is characterised by companies beginning to use their corporate websites to communicate financial information, usually by duplicating the hard copy annual report in an electronic format (PDF) that is available on the website. Stage III arrives when companies start to take advantage of the unique features and possibilities of the medium, e.g. audio and video files (Hedlin, 1999).

Using data from a developing country, South Africa, Loxton (2003), and Esterhuyse and Wingard (2016) both used the Hedlin (1999) three-stage model to assess the stage of companies' use of their corporate website to communicate with stakeholders. According to Loxton (2003), "most companies in SA appear to be in the second stage". Thirteen years later, Esterhuyse and Wingard (2016) stated that "instead of moving towards stage III (HTML, video and audio) of Hedlin's model (1999), JSE-listed companies still seem to find themselves in stage II (paper-equivalent PDF's)". Although it may seem that Johannesburg Stock Exchange (JSE)-listed companies have shown no improvement since the Loxton (2003) study, it should be noted that Loxton (2003) surveyed only the largest 40 companies, whereas Esterhuyse and Wingard (2016) assessed 205 JSE-listed companies of all sizes.

Intuitively one would expect an increase in companies' use of corporate websites as communication channel in the past decade for a number of reasons: decreased cost (e.g. increased bandwidth and internet access), non-textual communication via video and audio (enabled by increased bandwidth), increased expectation from users that information will be available via WWW (e.g. generation Z) and an increased demand and supply of information following regulatory changes (e.g. International Integrated Reporting Framework (IIRC, 2013) and related transparency disclosures).

Esterhuyse and Wingard (2016) argued that companies in developing countries would only fully utilise the benefits of corporate websites as communication vehicle if bandwidth were increased to acceptable international standards. The average South African bandwidth during 2012 was 3.22 Mbps when Esterhuyse and Wingard (2016) conducted their study, compared to an average bandwidth of 6.92 Mbps in March 2015 (Mybroadband, 2015) when Nel, Smit, Brummer (2017) completed a similar study on website communication by South African companies. Nel et al. (2017) report that on average, companies disclosed only 28% of attributes measured, with a significant cross-sectional variation between companies. The results of the Nel-study shows that the majority of companies examined in 2015 did not use their corporate websites optimally to communicate with investors. Having two datasets measuring the same phenomenon at distinct periods presented us with an opportunity to study the behaviour of matched pairs. The purpose of this study was therefore to examine whether there is evidence that some JSE companies has improved the usage of their corporate website as stakeholder communication channel between 2012 and 2015.

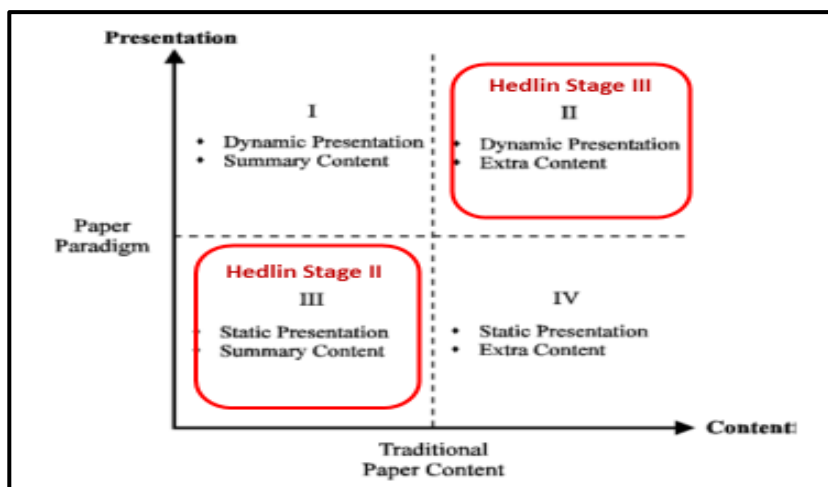
## LITERATURE REVIEW AND HYPOTHESES

Communications via the corporate website forms part of the voluntary disclosures that companies make to their various stakeholders. Popular theories offered to explain companies' rationale for engaging in any voluntary disclosures about their activities are agency theory, i.e. gaining the trust of the principals/shareholders (Jensen & Meckling, 1976) and legitimacy theory, i.e. gaining the approval of societal stakeholders (Suchman, 1995). Whilst accepting both these theories, we argue that institutional isomorphism is an appropriate theory for our context as this paper is based on the premise of technological advancements affecting disclosure behaviour, DiMaggio and Powell (1983) observe that institutions such as companies tend to behave more like one another over time. They identified three institutional isomorphic processes: coercive, mimetic and normative. Coercive isomorphism results from "formal and informal pressures exerted on organizations by other organizations upon which they are dependent and by cultural expectations in the society within which organizations function" (DiMaggio & Powell, 1983). Examples of this is where regulatory changes to disclosure requirements forces all companies to exhibit similar disclosure behaviour. The mimetic form of isomorphism occurs in the absence of regulation or clear guidelines (uncertainty about what is expected). In such circumstances, companies tend to mimic the behaviour or practices of other companies that are seen as successful leaders (DiMaggio & Powell, 1983). The normative force for isomorphic change in companies relates to the extent to which their personnel are members of professional bodies, for example, chartered accountants. The output produced by these employees will look similar to that of other companies that employ the same type of employees, because of professional standards regarding such work (DiMaggio & Powell, 1983). When considering what and how companies use their websites for corporate communication, we would be able to consider which type of institutional isomorphism is prevalent for our sample of companies in South Africa.

Prior studies into disclosure behaviour often distinguish between content and presentation, with content referring to all financial and non-financial information and presentation to the use of presentation technologies to communicate and enhance the information. Marston and Polei (2004) reasoned that although investors are mainly interested in the extent to which information has been provided (i.e. content), they also need to find this information as quickly and easily as possible (via clear presentation). Usability is defined by ISO 9241-11 as "the extent to which a system can be used by specified users to achieve a specified goal with effectiveness, efficiency and satisfaction in a specified context of use" (ISO, 1998). Research by the Nielsen Norman Group into the usability of websites found that websites should attract a visitor's attention within ten seconds; otherwise, visitors would leave the site in increasing numbers during the next 20 seconds. The focus of usability guidelines is therefore on getting the user to the right information swiftly and making it easy for them to view and use the information (Nielsen 2011). The Financial Accounting Standards Board (FASB) (2000) proposes four quadrants for corporate website communications, as

presented in Figure 1, on the basis of these two dimensions (namely content and presentation). Figure 1 is overlaid with the stages of website investor communication as proposed by Hedlin (1999) and discussed in the Introduction. Movement diagonally on the FASB model corresponds with the progression on the Hedlin model. As can be seen from Figure 1, Internet technologies should enable companies to move upward on the vertical axis by improving presentation formats, e.g. beyond text, and usability of websites. Pressure from users and regulators for more financial and non-financial information (e.g. Integrated Reporting) should move companies to the right on the horizontal axis by providing more content.

**Figure 1: The two dimensions of web design attributes: presentation and content.**



Source: Authors' composition from FASB (2000) and Hedlin (1999)

The average South African bandwidth during 2012 was 3.22 Mbps (Esterhuyse & Wingard, 2016), compared to an average bandwidth of 6.92 Mbps in March 2015 (Mybroadband, 2015) when Nel et al. (2017) conducted their study. During the intervening period the Integrated Reporting Framework (IIRC, 2013) was released, which calls for more information on strategies and risks and the interrelation with the companies' long-term sustainability and stakeholders. In terms of Figure 1, we therefore conclude that there were technology enablers for dynamic presentations as well as regulatory pressure for increased content provisioning in the South African capital market between 2012 and 2015. We therefore phrase our first hypothesis as follows:

*Hypothesis 1:* There is a change in companies' use of their corporate websites for communicating with stakeholders as measured by the total disclosure score between 2012 and 2015.

The total disclosure score was a composite of an annual reporting (AR) score, extra content (EC) score and a technology (T) score. We anticipate that the technology and regulatory stimulants discussed above might affect the subgroups differently. Utilising the subgroups we phrase the following sub-hypotheses:

*Hypothesis 1(a):* There is a change in the AR score between 2012 and 2015.

*Hypothesis 1(b):* There is a change in the EC score between 2012 and 2015.

*Hypothesis 1(c):* There is a change in the T score between 2012 and 2015.

Given the voluntary nature of corporate websites as communication medium, an assortment of empirical research focused on understanding the underlying reasons, or determinants for companies' to excel (or not) in using their corporate website to communicate with investors and stakeholders. Some of the research to date revealed that company industry, size (e.g. market capitalisation), leverage, dual listing status and shareholder dispersion are important determinants of disclosure (Botti, Boubaker, Hamrouni, & Solonandrasana, 2014; Fuertes-Callén, Cuellar-

Fernández & Pelayo-Velázquez, 2014; Mendes-Da-Silva & Onusic, 2014; Mohamed & Basuony, 2014; Omran & Ramdhony, 2016; Nel et al. 2017; Esterhuyse, 2018; Kundelienė & Stepanauskaitė, 2018; Zadeh, Salehi & Shabestari, 2018). We were therefore interested to see if these factors were associated with our sample of JSE-listed companies' disclosure behaviour over the two periods. We specify research hypothesis 2 as follows:

- Hypothesis 2(a):* Company industry is associated with the use of corporate websites as stakeholder communication channel in both 2012 and 2015.
- Hypothesis 2(b):* Company size (market capitalisation) is associated with the use of corporate websites as stakeholder communication channel in both 2012 and 2015.
- Hypothesis 2(c):* Company leverage is associated with use of corporate websites as stakeholder communication channel in both 2012 and 2015.
- Hypothesis 2(d):* Company dual listing status is associated with the use of corporate websites as stakeholder communication channel in both 2012 and 2015.
- Hypothesis 2(e):* Company shareholder dispersion is associated with the use of corporate websites as stakeholder communication channel in both 2012 and 2015.

## RESEARCH METHODOLOGY

The research methodology employed was quantitative, using a quasi-experimental pre-test post-test design to measure changes over time. Our study made use of secondary data. Hand-collected data measuring corporate website content and features from selected JSE-listed companies were obtained from the Esterhuyse and Wingard (2016) study (pre-test data) and Nel et al. (2017) study (post-test data). Cross-sectional secondary data about company characteristics were obtained from the JSE, the IRESS and Orbis databases for both periods. A variety of statistical tests were used based on the hypothesis tested and the characteristics of the data. In all tests the normality of the data was tested based on an examination of the normal p-plots and where appropriate, the Shapiro-Wilk test. Where applicable, non-parametric tests were used and reported where our data did not meet the normality assumptions for parametric tests.

### Study Sample

Although an important research advantage of examining corporate websites as communication medium is the publicly accessibility thereof (as data source), a disadvantage is that websites are not automatically archived for posterity. Researchers cannot go 'back in time' to see how a website looked at a previous point in time. For this reason accounting studies on website disclosures and features are usually cross-sectional (Botti et al., 2014; Fuertes-Callén et al., 2014; Mendes-Da-Silva & Onusic, 2014; Mohamed & Basuony, 2014; Omran & Ramdhony, 2016; Kundelienė & Stepanauskaitė, 2018; Zadeh et al., 2018). We were therefore in a unique position to obtain longitudinal data from two independent South African studies conducted on corporate websites as stakeholder communication channel respectively in 2012 for 205 JSE-listed companies (Esterhuyse & Wingard, 2016) and in 2015 for 85 JSE-listed companies (Nel et al., 2017). Fifty-eight JSE-listed companies were identified as common to both studies.

## Measurement Instrument

The 25 attributes that were measured, as well as their average availability in 2012 and 2015 are listed in Table 1 below. The attributes measured were also categorised into three subgroups: annual report (AR), extra content (EC) and technology (T). The disclosure scores were calculated following a content analysis of each company's website in each year. 'One' was awarded if the content or attribute was available and zero if not. Lastly, a total disclosure score was calculated from the three subgroups.

**Table 1: List of attributes.**

<b>Annual report (AR) (7 attributes)</b>	<b>2015</b>	<b>2012</b>	<b>Change</b>
Financial reports in the IR section (descriptive category)	98%	97%	2%
Annual report – PDF	98%	95%	3%
Archived annual reports	97%	91%	5%
Annual report format - HTML	29%	48%	-19%
Annual report format - downloadable Excel	12%	43%	-31%
Half-year results format - HTML	19%	33%	-14%
Customisation of reports by users for downloading	53%	24%	29%
<b>Extra content (EC) (8 attributes)</b>			
Snapshot/highlights page	57%	52%	5%
Archived key data (e.g. key ratios)	36%	34%	2%
Comparison with competitors and/or industry	24%	3%	21%
Result announcements format - audio (podcast)	22%	22%	0%
Result announcements format - video	31%	28%	3%
Result announcement format - Powerpoint slides	69%	41%	28%
AGM (audio or video)	7%	12%	-5%
Value proposition investors (e.g. future plans, new products)	88%	60%	18%
<b>Technology (T) (10 attributes)</b>			
Virtual tour (video) of facilities.	12%	7%	5%
Social media link - Twitter	34%	19%	16%
Social media link - YouTube	24%	9%	16%
Social media link - LinkedIn	29%	7%	22%
Social media link - Facebook	28%	21%	7%
Link to subscribe to E-mail alert service	48%	48%	0%
Link to subscribe to RSS content feed	10%	9%	2%
Availability of generalised email address for investor queries	38%	31%	7%
Availability of personalised email address for investor queries	24%	19%	5%
Availability of a contact form for investor queries	7%	5%	2%

Referring to Figure 1, it is now almost two decades since the FASB (2000) published their two-dimensional model of website communication. Having a *textual* report in HTML format with menus and clickable hyperlinks is no longer considered 'advanced technology'. Furthermore, PDF documents may also have thumbnails and clickable hyperlinks that eases navigation. We therefore adapt the definition of Quadrant III (static presentation & summary content) by incorporating reports in PDF *and HTML* format in that quadrant. Subgroup AR therefore attempts to measure Quadrant III behaviour (i.e. summary content, static and hyperlinked presentation of *textual* financial reports). EC attempts to measure Quadrant II behaviour (dynamic presentation (audio and video) and extra content). The third disclosure score (T), examined the use of technologies to enhance symmetrical communications between the company and its stakeholders.



## Independent Variables Measurements

As discussed in the Literature Review section, we identified a few prominent company characteristics that are associated with voluntary disclosure behaviour of companies. Although the JSE Industry Classification Benchmark (ICB) scheme of ten industries is the most popular classification scheme used in South Africa, it was deemed inappropriate for this study given the relative small sample size of 58 companies, which hindered meaningful statistical analyses<sup>1</sup>. For the purpose of this study, two different industry classification schemes were used to categorise companies. The first scheme is based on the SA Sector classification<sup>2</sup> which groups companies into one of four sectors: Resources, Financials, Industrials and Industrials-Other. The Two Sector scheme categorises companies in only one of two sectors: Primary or Consumer<sup>3</sup>. Table 2 describes the other measurements. This data was obtained from the JSE, IRESS and Orbis databases.

**Table 1: Independent variables measurements.**

Variable	Measurement
Size	Market capitalisation in ZAR millions. This was transformed to the natural log during statistical analyses.
Leverage	Debt to total assets.
Dual Listing	Dummy variable coded '1' if the company's shares were listed on another stock exchange in addition to the JSE, otherwise '0'.
Dispersed	We utilised the board independence indicators from the Orbis database of Bureau van Dijk for this measure. Companies classified with an 'A' (no known shareholders holding more than 25% direct or total ownership) was coded '1', otherwise zero.

## RESULTS AND DISCUSSION

We start the discussion of the results with the univariate statistics presented in Table 3. In Panel A, we see that the mean total disclosure score increased from 8.59 (2012) to 9.97 (2015). To address *hypothesis 1* (i.e. a change in corporate websites communication practices from 2012 to 2015 is expected), a paired t-test was performed. The 2015 total disclosure score differed significantly from the 2012 total disclosure score ( $t=3.4896$ ,  $p=0.0009$ , two-tailed<sup>4</sup>). Therefore, hypothesis 1 is accepted. It seems that for our sample of 58 JSE-listed companies, significant improvements were made overall in the usage of their websites over the three-year period. This can probably be ascribed to the increase in bandwidth as well as improved application of integrated reporting principles.

To address *hypotheses 1(a), 1(b) and 1(c)* (i.e. subgroups' scores are different in 2015 from 2012), a paired t-test was performed on the change in the average score of the AR subgroup and a Wilcoxon Matched pairs on the EC and T subgroups as the latter two subgroups' scores did not resemble a normal distribution. We report two-tailed significance values. From Table 3 Panel 1, we see that the mean AR score decreased from 4.31 to 4.07, but this was not statistically significant ( $t=-1.154$ ,  $p=0.253283$ ), leading use to reject hypothesis 1(a). The mean EC score improved from 2.53 in 2012, to 3.34 in 2015 and this increase was significant ( $Z=3.269$ ,  $p=0.001076$ ). Similarly, the T subgroup mean score improved from 1.74 in 2012, to 2.55 in 2015 and this increase was significant too ( $Z=2.889$ ,  $p=0.003854$ ). Therefore, hypotheses 1(b) and 1(c) are accepted. It seems that the change in disclosure behaviour centres around providing extra content and video and audio features, as well as improved symmetrical communication features.

Referring back to Table 1, it is suggested that the decrease in the AR score is caused by the decrease in the number of companies who are providing their annual reports in alternative formats such as HTML (19% decrease) and Excel (31% decrease). This is not surprising given research conducted by Nel (2004). He found that in all countries investigated, as in South Africa, the trend is to use more PDFs and less HTML documents. It is also important to note that almost all companies already supplied their current and archived annual report in a PDF format in 2012 resulting in insignificant increases to 2015. Esterhuyse and Wingard (2016) reported a ratio of 2:1 for the provisioning of PDF vs HTML annual reports in 2012. This ratio is also noticeable for the sample of 58 companies in 2012. In 2015, the ratio has deteriorated to 3:1, contributing to the decrease in the AR score. Regarding Excel, Nel (2004) documented

an increase in the use of Excel over a two year period (2002 to 2004). The use of Excel doubled when Esterhuyse and Wingard (2016) reported on their 2012 study. It is very alarming that the current study now report a 31% decrease in the number of companies that provided downloadable Excel sheets in 2015. The 29% increase in companies that allow the customisation of (mainly PDF) reports by users for downloading further suggests that companies are not willing to provide annual reports in alternative formats, viewing the PDF format as sufficient.

The significant increase in the EC scores is mainly attributable to more companies providing downloadable PowerPoint slides that accompany their results announcements. Providing comparative information on their competitors also showed a marked increase. It is also very encouraging to see companies expounding on their value proposition by sharing information on their future plans, product pipelines etc. Companies are therefore providing more content, but they could still do better by improving the availability of archived audio and video files of results announcements. The improvement in the technology (T) scores centres on greater social media presence of companies in 2015.

**Table 2: Descriptive statistics.**

Panel A: Continuous variables							
	Mean	Min	Quartile			Max	Std dev
			Q1	Q2	Q3		
TDS (2015)	9.97	2.00	7.00	10.00	13.00	19.00	3.97
TDS (2012)	8.59	2.00	6.00	8.50	11.00	17.00	3.84
AR (2015)	4.07	1.00	3.00	4.00	5.00	7.00	1.30
AR (2012)	4.31	2.00	3.00	4.00	5.00	7.00	1.49
EC (2015)	3.34	0.00	2.00	3.00	4.00	8.00	1.82
EC (2012)	2.53	0.00	1.00	2.00	4.00	7.00	1.78
T (2015)	2.55	0.00	1.00	2.00	4.00	7.00	2.05
T (2012)	1.74	0.00	0.00	1.00	3.00	6.00	1.67
Market cap (2015) (ZAR billions)	70.391	0.051	1.290	11.920	48.618	1 411.045	200.757
Market cap (2012) (ZAR billions)	45.262	0.065	1.410	11.520	30.649	812.411	125.003
Leverage (2015)	0.49985	0.002	0.33	0.47	0.67	1.21	0.26
Leverage (2012)	0.49854	0.03	0.35	0.48	0.64	0.97	0.22

Panel B: Categorical variables				
	Count 2015	Mean 2015	Mean 2012	Count 2012
Dual listed	18	11.83	11.19	16
JSE only	40	9.13	7.60	42
Dispersed shareholding	36	10.17	8.56	34
Concentrated shareholding	22	9.64	8.63	24
SA Sector	Count <sup>5</sup>	Mean 2015	Mean 2012	
Industrials	14	9.21	7.07	
Industrials - Other	21	9.95	8.71	
Resources	11	9.27	8.55	
Financials	12	11.50	10.17	
Two sector				
Primary	28	9.25	7.86	
Consumer	30	10.63	9.27	

In *Hypothesis 2* we hypothesized whether specific independent variables are associated with the use of corporate websites as stakeholder communication medium in both 2012 and 2015. From Table 3 Panel B, we can see that the mean disclosure scores for all industries increased over the period. As first step, t-tests were performed to ascertain whether the total disclosure score changed significantly in each industry, using respectively the SA-Sector

(4 industries) and Two Sector classification schemes. Using the Two Sector scheme, the total disclosure score increased significantly for both the Consumer Industries ( $p=0.041$ ) and the Primary Industries ( $p = 0.007$ ). The total score increased with 15% for companies categorised in Consumer Industries compared to 18% for companies categorised in Primary Industries. Based on a further t-test performed, the higher mean increase for companies in Primary Industries is however not statistically significant ( $p=0.83$ ). Using the SA-Sector scheme, the total disclosure score only increased significantly for Industrials ( $p = 0.016$ ), with no statistically significant increase for Resources ( $p = 0.267$ ), Industrials – Other ( $p = 0.056$ ) or Financials ( $p = 0.239$ ). Although Industrials increased with 30% compared to Resources (8%), Industrials – Other (14%) and Financials (13%), based on an ANOVA performed ( $F(3,54)=0.74162$ ,  $p= 0.53$ ) differences between industries is not statistically significant. We therefore reject hypothesis 2(a) that industry classification is associated with websites as stakeholder communication channels.

From Table 3 Panel B, we observe very little change in the dual listing status or the shareholder dispersion independent variables between the two periods. Two companies became dual listed by 2015 and two companies' shareholder profile became more dispersed. The mean disclosure scores for dual listed, JSE-only, dispersed and concentrated increased from 2012 to 2015. For dual listing status, we therefore conducted a one-way ANOVA on the disclosure scores of companies for 2012 and 2015 respectively. The results indicated a highly significant difference in the disclosure scores for companies with a dual listing in both 2012 ( $p = 0.00097$ ) and 2015 ( $p = 0.01$ ) compared to those that were only listed on the JSE. We therefore accept hypotheses 2(d) as being dual listed is significantly positively associated with the use of corporate websites as communication channel in both 2012 and 2015. From Table 4 we can also see that being dual listed is weakly to moderately correlated (Spearman) with the disclosure scores and significant at the 5% level. An ANOVA was also conducted on the dispersion variable and disclosure score in each year. The result indicated no significant difference in the disclosure scores for companies with a dispersed shareholder base compared to those with a concentrated shareholder base in both 2012 ( $p = 0.95$ ) and 2015 ( $p = 0.63$ ). We therefore reject hypotheses 2(e) as shareholder dispersion is not significantly associated with the use of corporate websites as communication channel in both 2012 and 2015. Spearman correlations (Table 4) between shareholder dispersion and the disclosure scores were also not significant and almost non-existent.

Market capitalisation increased in nominal terms from an average of R45 billion in 2012, to R70 billion in 2015, whilst the average leverage ratio remained constant at approximately 50% (Table 3 Panel A). To test hypotheses 2(b) and 2(c), we ran Pearson correlations. From Table 4, it can be seen that market capitalisation is strongly positively correlated with the total disclosure score in both 2015 and 2012 and this was significant at the 5% level; while leverage was only weakly positively associated with the total disclosure score, this was only significantly correlated in 2015 and not in 2012. We therefore accept hypotheses 2(b) that there is an association between size and use of corporate websites as stakeholder communication channel, but we are undecided about hypotheses 2(c) as leverage is significant in 2015, but not in 2012.

**Table 4: Correlations.**

	2015					2012				
	TDS	Size (ln)	Lev	Disp	Dual	TDS	Size (ln)	Lev	Disp	Dual
<b>TDS</b>	1.00					1.00				
<b>Size (ln)</b>	0.60*	1.00				0.44*	1.00			
<b>Lev</b>	0.27*	0.31*	1.00			0.18	0.19	1.00		
<b>Disp</b>	0.06	0.05	0.12	1.00		-0.02	0.04	0.13	1.00	
<b>Dual</b>	0.29*	0.29*	-0.16	-0.01	1.00	0.42*	0.24	-0.13	-0.11	1.00
TDS is total disclosure score; Size is market capitalisation with natural log transformation; Lev is leverage; Disp is shareholder dispersion; Dual is dual listed. For binary variables (Disp and Dual) Spearman rank correlations are reported. For all other variables, Pearson correlations are reported.										
* Significant correlations at the 5% or lower level. Two-tailed significant levels are reported for all correlations.										

## CONCLUSIONS AND CONTRIBUTIONS

The purpose of this study was to determine whether there were improvements in the usage of corporate websites as communication channel with stakeholders. We obtained website disclosure scores of 58 JSE-listed companies in 2012 and 2015. Our findings are that disclosure behaviour overall did improve over the period, especially regarding extra content and technological features. When measured against the FASB (2000) framework, it seems that the financial reports are still in Quadrant III (textual reports in PDF and lesser extent HTML texts). Financial reports are still dominated by PDF formats. Surprisingly, a decline was found in the provisioning of HTML reports, continuing a trend previously observed in 2012. Regarding extra content (results announcements, comparative figures and other non-financial forward-looking information) and technological features, companies have moved to Quadrant II of the FASB (2000) framework (dynamic presentation and extra content). This is probably enabled by improved bandwidth in South Africa over the period and the practice of integrated reporting.

Our study contributes to the theory of voluntary disclosure behaviour by showing that over time, companies can decide to reduce their disclosure effort. Previously it was usually assumed that disclosure behaviour will always increase or be stagnant over time. Comparing for the first time website communication practices over two periods for the same sample, our study seems to indicate that JSE-listed companies in our sample are exhibiting mimetic isomorphism in that they follow the lead of other companies that reduces the availability of HTML reports.

Our study also contribute to the field of study on corporate communication practices, especially in regards to the use of corporate websites and Internet technologies. As far as we can gather, this was the first study in South Africa that utilised longitudinal data for website disclosure scores. We investigated five factors that other studies reported as being associated with website disclosure behaviour. We found that industry type, shareholder dispersion and leverage were not associated with disclosure behaviour in each year. Market capitalisation and being dual listed were positively associated with disclosure behaviour in each year.

## LIMITATIONS AND SUGGESTIONS FOR FURTHER STUDIES

As with any study, our study also suffer from limitations. Although it is admitted that the selection of our convenience study sample of 58 companies will restrict the power of statistical tests, it is deemed acceptable given non-availability of archived website data necessary for large scale longitudinal studies. The convenience sample's findings can also not be extrapolated to all listed companies, although we are of the view that it is representative enough (the JSE has between 250 and 300 companies listed on its Main Board). We also recommend that the study is repeated to obtain a third or more sets of data. Other researchers can also expand the size of the sample or repeat the study in different domains. We also suggest that multivariate models for website disclosure behaviour be tested in addition to the bivariate associations that we tested.

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<sup>1</sup> The ICB categories for our sample were (number of companies in brackets): Basic material (10), consumer goods (5), consumer services (10), financials (12), healthcare (1), industrials (14), oil & gas (1), technology (3), telecommunication (2) and utilities (0).

<sup>2</sup> In terms of the SA Sector classification, Resources consist of companies listed in Basic materials and Oil & Gas, Financials of companies listed in Financials, Industrials of companies listed in Industrials, and Industrial – Other of companies listed in Consumer goods, Consumer services, Technology, Telecommunication and Health Care.

<sup>3</sup> Primary Industries consist of Industrials, Basic materials, Oil & Gas and Technology; and Consumer Industries of Consumer goods, Consumer services, Telecommunication, Health care and Financials.

<sup>4</sup> The result was confirmed with the non-parametric test, Wilcoxon Matched pairs ( $p = 0.0069$ ).

<sup>5</sup> Industry membership (i.e. SA Sector or Two sector) did not change between 2012 and 2015.

# CONSUMER ATTITUDE TOWARDS WEB ENABLED MARKETING IN THE PHARMACEUTICAL INDUSTRY

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## ABSTRACT

*Web media has become an essential part of life and has fundamentally changed the way the marketing was done. However a decade ago web media was not a part of healthcare industry particularly the pharmaceutical industry but now social media / web media has also become an eminent part of the healthcare industry. The Pharma industry, as a core part of healthcare, is no exception to this. New technologies and innovations are already enabling pharma companies to improve medicine development and patient care. Ultimately, Pharma digitalization will help the pharma business become more patient centric. Patients will gain more possibilities for better and cost-effective care outcomes. However online marketing of healthcare products/pharmaceutical product using online pharmacy is also an important topic concerning the consumer in the healthcare industry. Accordingly this research revolves around the web marketing in form of social media and the attitude of the consumer toward online pharmacy or online sources of buying pharmaceutical /healthcare related product.*

**Keywords:** social media, online media, web enabled marketing, pharmaceutical industry, and healthcare industry.

## INTRODUCTION

Digital media is an essential part of life and digitalization is fundamentally changing the healthcare industry. The Pharma industry, as a core part of healthcare, is no exception to this. New technologies and innovations are already enabling pharma companies to improve medicine development and patient care. Ultimately, Pharma digitalization will help the pharma business become more patient centric. Patients will gain more possibilities for better and cost-effective care outcomes. In addition, with digital solutions patients will be better informed and will be participating in their own care with the practitioners to ensure that care decisions respect patients' wants, needs and preferences. Moreover, digital collaborative services can bring transparency and facilitate patient centered activities in the care between the stakeholders while maintaining shared up-to-date data on the patient health and quality of life. This will lead to a better care results as well as patient engagement in the care process. (Kemppainen, and Liikkanen, 2017). Thus, as per Parekh, Shah, and Kapupara, (2016) this will primarily increase the ease of interaction with end users, less time-consuming engagement, and great cost-effectiveness. Moreover, Kaplan, and Haenlein, (2010) are of the opinion that the digital marketing has led to greater interest by physicians in use of social media and other digital tools. Due to the wide use of social media, people can connect socially and share information with great ease. Thus, as per Thackeray, Neiger, Hanson, and McKenzie, (2008) this will be helpful for patients, physicians, and healthcare organizations to interact. For example, in the United Kingdom, more than half of the public uses Facebook to seek healthcare information and communicate about health issues. LinkedIn and Facebook are among the popular tools for healthcare interaction in European health organizations. Besides this Moorhead, Hazlett, Harrison, Carroll, Irwin, and Hoving (2013) suggests that the use of informative websites related to health is particularly prominent for inhabitants of the United States. Moreover PWC (2007) reported that by 2020, electronic medical records, e-prescribing and remote monitoring will also give healthcare payers and providers in many countries access to extensive outcomes data, as we indicated in "Pharma 2020: The vision". They will then be able to determine which medicines are particularly safe, efficacious and cost-effective in different patient populations, and include such information in their treatment protocols (Pwc.com, 2007). Thus, it can be argued that pharmaceutical sector is likely to extensively adopt the digital approach, which will serve as the backbone of the industry (Jawaid and Ahmed, 2018).

The most interesting result of the technology explosion and easy access to it by consumers is the disruption of the market and the marketing practice. The customer today is an empowered of the interactive online media, content and communication process. Technology is changing the context of and practice of marketing: marketers are increasingly forced to operate in a complex and changing world where they do not have any more the full control of the media and the message. The Marketing becomes increasingly digital and continuous technological developments present marketers with new challenges and opportunities. With the rapid development of digital technology and social media in the pharmaceutical industry, it is very important to study the impact of social media in pharmaceutical industry and its affect the life of the consumers.

## LITERATURE REVIEW

According to Ventola, (2014) “social media” is broad and constantly evolving term. It is an internet-based tool that allows individuals and communities to gather, to communicate and to share information, ideas, personal messages, images, and other content; to the extent that it allows collaborating with other users in real time (Grindrod et al., 2014). Moreover, Von Muhlen and Ohno-Machado, (2012) is of the opinion that social media can also be referred to as “Web 2.0” or “social networking” as it provides with variety of features which serves different purposes for the user such as blogs, social networks, video and photo-sharing sites, wikis etc. (Courtney, Shabestari and Kuo, 2013). It’s the Web-based tools that are used for computer-mediated communication. In health care, they have been used to maintain or improve peer-to-peer and clinician-to-patient communication, promote institutional branding, and improve the speed of interaction between and across different health care stakeholders.

Besides social media for personal and health use is on the rise has it can provide a platform for patients to gather information, explore options, and share their experiences. Further social media has provided online platforms for interactions to occur around various health topics relating to patient education, health promotion, public relations, and crisis communication. Thus, social media in improving patient care although it is not yet documented well. However over 80% of Americans seeking health information online, the impacts of social media on health cannot be ignored. Moreover (Osterrieder, 2013) also is of the opinion that social media, web and mobile technologies are increasingly used in healthcare thus benefitting the patients from disease self-management tools, and closer monitoring, but it is not free from drawbacks such as low communication barriers, limited privacy and security issues. Besides this, as per Pharmaphorum (2018) one reason why many pharmaceutical marketers have been reluctant to use social media is to do with the reporting of adverse events, as Pharma is under a legal duty to pass on reports of adverse events, and there remains uncertainty as to whether this responsibility extends to social media. Social media has moved beyond being a fashionable word to one that is drawing renewed attention from the pharma and healthcare industries. The power of social media, and the impact that it can give to brand perception and on sales, besides, the increased interest of the regulators is resulting the shift from conventional marketing to social media. As patient centricity becomes the cynosure of attention, the need to capture their views becomes necessary. It has been observed in studies that of the more than 74% of Internet users that engage on social media, 80% are looking for health information, with 90% of the younger media-savvy 18-to-24 year-olds<sup>2</sup> claiming that they relied upon this source, using it twice as often as the more senior population. They shared health-related conversations and patient stories on diverse topics such as how someone coped with a chronic condition, views on diet and exercise, and their choice of physician. The most accessed online resources for health-related information included WebMD (56%) and Wikipedia (31%) (Stricker, 2019). Patients wanted doctors to actively share updates on the disease, new pipeline compounds, their experience with different drugs, etc., on social media and 60% claimed that they trusted what the doctors were posting. It becomes more important for healthcare professionals (HCPs) to share accurate information and timely updates with the patient community. It was not only patients who were leveraging social media, 60% of HCPs were also actively watching what their counterparts are sharing on health-related issues. Doctors themselves seemed to truly believe that social media is impacting the quality of care. Forty percent of patients also relied upon social media to assess how others were dealing with chronic conditions. (Limaye, and Saraogi, 2018) Furthermore, as per (Bernhardt, Alber and Gold, 2014) in (Ventola, 2014) it will be worth noting that the active participants on social media have increased from 8% to 72%, moreover they comprise of all age and all profession, but, only 10% of pharmacists use Twitter. Furthermore, social media also provide health care professionals (HCPs) to share information and to promote health and engage with the public, and to educate and interact with patients, caregivers, students, and colleagues. Moreover, HCPs use social media to improve health outcomes by developing a professional network to increase personal awareness of news and discoveries, motivate patients, and provide health information to the community. As



per a recent Surveys it was noted that healthcare professional such as physicians, pharmacists were relatively slow in adopting social media for the healthcare purpose. Moreover as per Enyinda, Ogbuehi and Mbah, (2018) implementing social media in the pharmaceutical and health-care marketing is important for several reasons, such as to improve relationship marketing, to enhance customer engagement and to monitor brand. According to Shankar and Li (2014), the value of social media marketing for pharmaceutical firms includes the following: first, engaging customers in conversation about the firm, product and brand, build relationship with online influencers, hear feedbacks from customers who use their products and services and understand the customers and the market needs; second, allowing firms to speak more cost efficiently, to more customers and louder than the traditional media; third, offering a new channel for firms to reach new customers cannot be reached easily through the traditional media; fourth, driving sales and financial return; and fifth, providing word-of-mouth that can boost sales and return on investment. Traditionally, marketing managers spend millions of dollars on marketing research and promotions to understand and influence consumer behavior toward their brands. In today's environment, given that consumers are increasingly migrating to social media platforms to seek information and drive their decision-making offers pharmaceutical marketers new opportunity to sense and respond to changes in consumer purchasing behavior. Social media is a great influencer to consumer buying behavior and the attendant sales. Arguably, these days, a consumer who wishes to buy a cholesterol drug will likely consult with friends, colleagues, co-workers and relatives to acquire more information about its efficacy and competitive brands. Social media is increasingly influencing how people search for health-related information (Cordos *et al.*, 2017). Thus, the propensity that a consumer will visit any social media channels and search for disease and treatment or drug-related information will significantly increase in the future. Consumers rely on social media for disease and treatment-related information, social and emotional support for those living with similar condition (Benetoli *et al.*, 2017;), to educate themselves on a disease process and to find hospital, physicians, and physician networks most capable of treating their condition (De Martino *et al.*, 2017). Similarly, patient communities can propagate closed-group communication behavior or the groupthink that can influence a consumer's buying behavior. To gain access to health consumer communities, pharmaceutical marketers have no other option but to get involved in the social media communities, which in turn are increasing the online pharmacies. Thus this research is based on the consumer perception and attitude toward these online pharmacies and health related information on social media. The hypothesis developed for the research are as under:

## **NON-PARAMETRIC CORRELATION: SPEARMAN'S CORRELATION**

**Hypothesis 1: Association between age of the respondent who purchase of medicine /related product online pharmacy**

**The hypothesis will be:**

H0- age of the respondent has no impact on respondent who purchase of medicine /related product online pharmacy.

H1- age has impact an impact on respondent who purchase of medicine /related product online pharmacy.

**Hypothesis 2: Association between age of the respondent and price being the reason for buying online**

**The hypothesis will be:**

H0- age of the respondent has no impact on price being the reason for buying medicine from online sources.

H1- age has impact an impact price being the reason for buying online sources.

**Hypothesis 3: Association between age of the respondent and convenience being the reason for buying online.**

**The hypothesis will be:**

H0- age of the respondent is not related to convenience when buying medicine from online sources.

H1- age of the respondent is related to convenience when buying medicine from online sources.

**Hypothesis 4: Association between age of the respondent and choice being the reason for buying online**

**The hypothesis will be:** H0- age of the respondent has no impact choice when buying medicine from online sources.

H1- age has impact choice of buying medicine from online sources.

**Hypothesis 5: Association between age of the respondents and cumulative scores of different reasons for buying medicines/related healthcare products from online pharmacy.**

**The hypothesis will be:**

H0- age of the respondent has no impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store.

H1- age has impact an impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store.

**Hypothesis 6: Relation between age of the respondent and information security being risk of buying medicine online.**

**The hypothesis will be:**

H0- age of the respondent has no relation Information security when buying medicine from online sources;

H1- age has impact an impact on Information security when buying medicine from online sources.

## METHODOLOGY

A constructivism philosophical orientation underpins the empirical research which is a sequel to the (foregoing) review. This orientation believes that individuals develop subjective views about objects or phenomenon from their experience. In this paradigm, a researcher would seek the complexity of the views developed by individuals (Creswell, 2014). According to deVaus (2002) questionnaire as a technique of data collection in which each person is asked to respond to the same set of questions in a predetermined order. Moreover, in this research, primary data was collected using a structured questionnaire as they work best with standardized questions that you can be confident will be interpreted the same way by all respondents (Robson 2002). Moreover, questionnaires therefore tend to be used for descriptive or explanatory research. However, in this study explanatory research will be used so as to enable to examine and explain relationships between variables, in particular cause and effect relationships. Besides this, the Self-administered questionnaires were used in the study as it is usually completed by the respondents. The questionnaire was based on rating scale, and the Likert-style rating scale was used. Further, Likert-style rating scale is a method in which the respondent is asked how strongly she or he agrees or disagrees with a statement or series of statements, usually on a four-, five-, six- or seven-point rating scale. Possible responses to rating questions should be presented in a straight line rather than in multiple lines or columns as this is how respondents are most likely to process the data (Dillman 2007). Besides if series of statements are used, then they should be kept in the same order of response categories to avoid confusing respondents (Dillman 2007). Moreover, both positive and negative statements should be used so as to ensure that the respondent reads each one carefully and thinks about which box to tick. The research design selected was correlational. The Random sampling was selected so as to ensure all the members of a population has an equal chance of being selected (Creswell, 2013). In this research, primary data was collected using the questionnaire, accordingly a structured questionnaire was prepared, and data was collected from the 200 adult consumers who were above the age of 18 were selected to fill in the structured questionnaire. Quantitative data collected is in a raw form, that is, before these data have been processed and analyzed, convey very little meaning to most people. These data, therefore, need to be processed to make them useful, that is, to turn them into information. Quantitative analysis techniques such as graphs, charts and statistics is normally done which helps the researcher to explore, present, describe and examine relationships and trends within our data.

## DATA ANALYSIS

Accordingly, after the data was collected the, the data was coded and compiled and then it was entered in SPSS statistical software to be analyzed. The collected data was ordinal data as ranked data are a more precise form of categorical data. In such instances the relative position of each case within the data set, such as where a respondent is asked to rate how strongly she or he agrees with a statement, collect ranked (ordinal) data (Blumberg et al. 2008). Further the ordinal data was tested non-parametric correlation such as Spearman's rank correlation coefficient.

### Non-Parametric Correlation: Spearman's Correlation

**Hypothesis 1: Association between age of the respondent who purchase of medicine /related product online pharmacy**

Does age of the respondent and respondent who purchase of medicine /related product online pharmacy are related. If age has significant impact on respondent who purchase of medicine /related product online pharmacy, then it can be said that age and respondent who purchase of medicine /related product online pharmacy are related. To find out the impact of age and respondent who purchase of medicine /related product online pharmacy

**The hypothesis will be:** H0- age of the respondent has no impact on respondent who purchase of medicine /related

product online pharmacy. H1- age has impact an impact on respondent who purchase of medicine /related product online pharmacy.

As value of the Spearman correlation is .603 which is less than 1. This indicates that we can reject the null hypothesis which says age has no relation respondent who purchase of medicine /related product online pharmacy, thus this result shows that age has impact on respondent who purchase of medicine /related product online pharmacy. Thus, there is a significant relationship between the age and impact on respondent who purchase of medicine /related product online pharmacy; furthermore, the relationship is positive and strong.

**Table 1**

Correlations				
			Age	Purchase of medicine /related product online pharmacy
Spearman's rho	Age	Correlation coefficient	1.000	.603**
		Sig. (2-tailed)	.	.000
		N	200	200
	Purchase of medicine /related product online pharmacy	Correlation coefficient	.603**	1.000
		Sig. (2-tailed)	.000	.
		N	200	200

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Hypothesis 2: Association between age of the respondent and price being the reason for buying online**

Does age of the respondent and price being the reason for buying online are related. If age has significant impact on price being the reason for buying online pharmacy, then it can be said that age and price being the reason for buying online pharmacy are related. To find out the impact of age and price as being the reason for buying from healthcare related products from online pharmacy.

**The hypothesis will be:** H0- age of the respondent has no impact on price being the reason for buying medicine from online sources. H1- age has impact an impact price being the reason for buying online sources.

**Table 2**

Correlations				
			Age	Reason for buying online- price
Spearman's rho	Age	Correlation coefficient	1.000	.162*
		Sig. (2-tailed)	.	.022
		N	200	200
	Reason for buying online- price	Correlation coefficient	.162*	1.000
		Sig. (2-tailed)	.022	.
		N	200	200

\*. Correlation is significant at the 0.05 level (2-tailed).

As value of the Spearman correlation is .162 which is less than 1. This indicates that we can reject the null hypothesis which says age has no relation on price being the reason for buying medicine from online sources pharmacy, thus this result shows that age has no impact on price being the reason for buying medicine from online sources pharmacy. Thus, there is a significant relationship between the age and impact on price being the reason for buying medicine from online pharmacy; furthermore, the relationship is positive and strong.

**Hypothesis 3: Association between age of the respondent and convenience being the reason for buying online.**

Does age of the respondent and convenience being the reason for buying medicine/ pharmaceutical product from online sources pharmacy is related. If age has significant impact on convenience being the reason when buying medicine from online sources, then it can be said that age and convenience being the reason when buying medicine from online sources are related. To find out the impact of age and convenience being the reason when buying medicine from online pharmacy

**The hypothesis will be:** H0- age of the respondent is not related to convenience when buying medicine from online sources. H1- age of the respondent is related to convenience when buying medicine from online sources.

**Table 3**

Correlations				
			Age	Reason for buying online -convenience
Spearman's rho	Age	Correlation coefficient	1.000	.304**
		Sig. (2-tailed)	.	.000
		N	200	200
	Reason for buying online -convenience	Correlation coefficient	.304**	1.000
		Sig. (2-tailed)	.000	.
		N	200	200

\*\* . Correlation is significant at the 0.01 level (2-tailed).

As value of the Spearman correlation is .304 which is less than 1. This indicates that we can reject the null hypothesis which says age has no relation on convenience being the reason for buying medicine / pharmaceutical product from online sources pharmacy are related convenience, thus this result shows that age has an impact on convenience being the reason for buying medicine / pharmaceutical product from online pharmacy are related. Thus, there is a significant relationship between the age and impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store; furthermore, the relationship is positive and strong.

#### **Hypothesis 4: Association between age of the respondent and choice being the reason for buying online**

Does age of the respondent and additional charges incurred when buying medicine from online sources pharmacy are related. If age has significant impact on additional charges incurred when buying medicine from online sources online pharmacy, then it can be said that age and additional charge incurred while buying medicine from online pharmacy are related. To find out the impact of age and additional charges incurred while buying medicine and associated product from online pharmacy

**The hypothesis will be:** H0- age of the respondent has no impact choice when buying medicine from online sources.

H1- age has impact choice of buying medicine from online sources.

**Table 4**

Correlations				
			Age	Reason for buying online -choice
Spearman's rho	Age	Correlation coefficient	1.000	.208**
		Sig. (2-tailed)	.	.003
		N	200	200
	Reason for buying online -choice	Correlation coefficient	.208**	1.000
		Sig. (2-tailed)	.003	.
		N	200	200

\*\* . Correlation is significant at the 0.01 level (2-tailed).

As value of the Spearman correlation is .208 which is less than 1. This indicates that we can reject the null hypothesis which says age has no relation on additional charges incurred when buying medicine from online sources pharmacy, thus this result shows that age has impact on impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store. Thus, there is a significant relationship between the age and impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store; furthermore, the relationship is positive and strong.

#### **Hypothesis 5: Association between age of the respondents and cumulative scores of different reasons for buying medicines/related healthcare products from online pharmacy.**

Does age and cumulative scores of different reasons for buying medicines/related healthcare products from online pharmacy are associated. If age has significant impact on cumulative scores of different reasons for buying medicines/related healthcare products from online pharmacy, then it can be said that age, cumulative scores of different reasons for buying medicines/related healthcare products from online pharmacy. To find out the impact of age and cumulative score of different reasons for purchase of medicine and other healthcare related product from online pharmacy

**The hypothesis will be:** H0- age of the respondent has no impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store. H1- age has impact an impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store.

**Table 5**

Correlations				
			Age	cumulative scores of reasons of buying online
Spearman's rho	Age	Correlation Coefficient	1.000	.277**
		Sig. (2-tailed)	.	.000
		N	200	200
	cumulative scores of reasons of buying online	Correlation Coefficient	.277**	1.000
		Sig. (2-tailed)	.000	.
		N	200	200
**. Correlation is significant at the 0.01 level (2-tailed).				

\*\*. Correlation is significant at the 0.01 level (2-tailed).

In this case as value of the Spearman correlation is .277 which is less than 1. This indicates that we can reject the null hypothesis which says age has no relation on impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store, thus this result shows that age has impact on impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store. Thus, there is a significant relationship between the age and impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store; furthermore, the relationship is positive and strong.

**Hypothesis 6: Relation between age of the respondent and information security being risk of buying medicine online.**

Does age of the respondent and additional charges incurred when buying medicine from online sources pharmacy are related. If age has significant impact on additional charges incurred when buying medicine from online sources online pharmacy, then it can be said that age and additional charge incurred while buying medicine from online pharmacy are related. To find out the impact of age and additional charges incurred while buying medicine and associated product from online pharmacy

**The hypothesis will be:**

H0- age of the respondent has no relation Information security when buying medicine from online sources;

H1- age has impact an impact on Information security when buying medicine from online sources.

**Table 6**

Correlations				
			Age	Information security
Spearman's rho	Age	Correlation coefficient	1.000	-.173*
		Sig. (2-tailed)	.	.015
		N	200	200
	Information security	Correlation coefficient	-.173*	1.000
		Sig. (2-tailed)	.015	.
		N	200	200
*, Correlation is significant at the 0.05 level (2-tailed).				

\*. Correlation is significant at the 0.05 level (2-tailed).

As value of the Spearman correlation is -.173 which is less than 1. This indicates that we can reject the null hypothesis which says age has no relation on additional charges incurred when buying medicine from online sources pharmacy, thus this result shows that age has impact on impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store. Thus, there is a significant relationship between the age and impact on cumulative scores of different reasons for buying medicines/related healthcare products from online store; furthermore, the relationship is negative and strong.

## CHALLENGES WITH SOCIAL MEDIA AND PHARMACEUTICAL INDUSTRY AND SCOPE OF THE PAPER

Challenges that social media for personal and healthcare use is on the rise, as it can provide a platform for patients to gather information, explore options, and share their experiences. Moreover (Ventola, 2014) also believes social media, web and mobile technologies are increasingly benefitting the patients but it is not free from drawbacks such as low communication barriers, limited privacy and security issues. Thus, security of data is a major drawback, and this can increase the security issues and ethical issues etc.

## Discussion

Thus based on the quantitative studies it was found that people of specific age go to social media looking for the health related information, however as per (Bernhardt, Alber and Gold, 2014) found out that only people of certain age buy healthcare related products from online resources because many factors such as of the choice, Convenience, additional charges. Moreover, respondents all age were considerate that the information security is important on the online sources, further it also showed that people of only specific age searched healthcare related information over the internet, or on social media or on the company website. Thus, this shows that all the people do not search the healthcare information on the internet although lots of them.

## CONCLUSION AND LIMITATIONS

This study has some limitations because of its exploratory nature. The numbers of people included in the study were relatively small, although the sample permits the generalization of findings. Besides this, the profiles of respondents present in this paper are only from the UK market, as it is noted that national and cultural conditions can affect the specific customer behavior and preferences. Besides this, in this paper only the quantitative analysis presented however, it should be complemented by qualitative information to give a meaningful or deeper understanding of the subject matter. Thus to understand the consumers' behavior and attitudes towards online pharmacies in Pharmaceutical industry, the study found that not all the age group people search or buy healthcare related products over the internet or on the social media. It's only some specific age group who specifically search or buy the healthcare related product or information over the social media or from the online sources. However, it was also found that people of all the age group were concerned about the data security over the social media.

The limitation of this study is that most of the respondents in this study were in the age group in between 20 to 40. So, may be the study will not give much information on how the people who were above the age 40 will perceive the social media and healthcare related products or information.

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# THE ROLE OF TRADITIONAL LEAFY VEGETABLES IN HOUSEHOLD FOOD SECURITY IN RURAL AREAS: CASE OF MVUZI MAGXENI A/A IN THE EASTERN CAPE

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## ABSTRACT

*Traditional leafy vegetables (TLV's) have been consumed in the rural areas of the Eastern Cape in South Africa for centuries and have been showing the capacity to develop and contribute to household food security in the Mvuzi Magxeni administration area by providing readily accessible nutritious food. To assess the role and the importance of traditional leafy vegetables in the rural community of Mount Frere, South Africa, the study aimed at identifying and evaluating the levels of awareness when it comes to the consumption and attitudes of rural households towards traditional leafy vegetables. Data was collected through focus group discussions and questionnaire surveys that were conducted on 66 households. Results showed that traditional leafy vegetables such as blackjack, amaranthus and pumpkin leaves were found to be in numerous quantities during summer. Pumpkins were considered to be more sufficient for food security because they provided leaves, seeds and fruit. There were general positive attitudes towards traditional leafy vegetables and the community did not consider these vegetables to be food for poor people contrary to the belief of people living in the township areas. The processing time and cooking of traditional leafy vegetables incorporated a number of different respondents; some were concerned over the loss of nutrients. The majority of the community respondents, however, consumed traditional leafy vegetables four times a week and they considered traditional leafy vegetables to be nutritious and good immune boosters since they have nutrients that are needed by the body. Furthermore, traditional leafy vegetables were reported to be declining over time due to changes in customs and land use. Therefore, it is recommended that traditional leafy vegetables, as a food-based initiative towards the alleviation of hunger and poverty in economically disadvantaged communities, should start promoting and strengthening efforts that will further encourage the consumption of traditional leafy vegetables.*

**Keywords:** Indigenous Knowledge, traditional foods, consumption, nutrients, rural community, food security, households, traditional leafy vegetables.

## INTRODUCTION

Traditional leafy vegetables have been consumed by many rural communities for centuries and have the potential to contribute to household food security by providing access to nutritious food. The role and the importance of traditional leafy vegetables in the rural areas of Mvuzi Magxeni administration area was demonstrated through a survey that was conducted during December 2018 in the Mvuzi region of the Eastern Cape, South Africa. The study aimed at identifying and assessing the level of awareness of rural households in the Mvuzi area towards traditional foods often at times referred to as African vegetables which are accepted and consumed as vegetables by communities (Kimiye et al., 2007; Nguni and Mwila, 2007). Traditional leafy vegetables have contributed to household food security for decades in South Africa. They can be eaten fresh or cooked, steamed or boiled and in many instances new vegetables are generated by drying and chopping them for use in soups (Kimiye et al., 2007). They grow as weedy, cultivated, weedy or wild crops and mainly serve for the purposes of cultural values. Although, traditional leafy vegetables have been held in the highest regard and have the potential to contribute to food security in poverty-stricken rural communities, the indigenous knowledge that comes with the use of traditional leafy vegetables is slowly decreasing.



This is as a result of not having indigenous knowledge of traditional leafy vegetables being passed down from generation to generation (HRSC, undated).

A majority of traditional leafy vegetables have the ability to tolerate heat and drought and can grow without a lot of resources needed which is of great advantage to farmers that do not possess economic power or are not wealthy enough (van Rensburg *et al*, 2007). Traditional leafy vegetables are important and play a pivotal role when it comes to the daily food and nutritional necessities of several rural communities and these vegetables are slowly gaining entry into urban markets (Nguni and Mwila, 2007). In Nepal, Khadka (2000) stated that most individuals living in the rural areas did not consider their meal complete if there were no traditional leafy vegetables present, which illustrates the importance of these vegetables in other cultures. In the southern African region, traditional leafy vegetables are consumed as relish or they are combined with sorghum or maize meal after cooking these vegetables with peanut butter or fats and salt (Van den Heever, 2007).

Traditional leafy vegetables have been argued to be great sources of necessary dietary nutrients and have compounds that provide immune strengthening properties. Numerous traditional leafy vegetables, whether wild or domesticated, have high amounts of important elements such as calcium, iron, and zinc and are a great source of vitamins, minerals, trace elements, dietary fibre and proteins (IPGRI, 2003; Moore *et al*, 2006). This ensures that traditional leafy vegetables are complementary to a majority of cereals that are staples of several households in the southern African region. The fibre is of high importance for the human digestive system as it also acts as filler (Okigbo, 1990). There are however, grievances that have been made known about the decrease in the consumption of traditional leafy vegetables. Individuals working in the medical field and nutrition specialists argue that nutritional problems more specifically in children located in the rural communities are caused by not consuming traditional leafy vegetables. The scarcity of water and the increase of HIV/AIDS is cause for further investigations into traditional leafy vegetables because of nutrition and climate adaptability. Numerous rural people do not have a regular income and therefore, cannot buy vegetables although they are available. People living in rural areas can benefit greatly from cheap traditional leafy vegetables. In impoverished rural communities, traditional leafy vegetables provided a cheap and sustainable food source. Furthermore, providing greater awareness around traditional leafy vegetables specifically among individuals located in the rural areas of the Eastern Cape province of South Africa will ensure a greater deal of food security in the province. This will lead to a decrease in the reported cases of nutritional deficiencies that have currently plagued the province.

Historically speaking, traditional leafy vegetables have been known to be an excellent source of nutrition more especially among impoverished rural and peri-urban communities of Southern Africa. Traditional leafy vegetables are also argued to contain medical substances. When looking at the indigenous knowledge and practices that are associated with traditional leafy vegetables, both of these are now decreasing because young people view indigenous knowledge and practices as ancient behaviour (HRSC, undated). The roots, leaves and the twigs of traditional leafy vegetables including the bark serve a good purpose in the use of traditional medication. Okafor (1997) provided an example of the importance of traditional leafy vegetables in Nigeria whereby the author stated that traditional leafy vegetables play a vital role for medicinal use, in receiving money and maintaining cultural values in Nigeria. Traditional leafy vegetables when consumed alleviate and manage illnesses such as “malaria, diarrhea, anaemia, colds, coughs, skin infections, malnutrition, HIV/AIDS and high blood pressure” (Kimiye *et al*, 2007). Vitamins and minerals found in traditional leafy vegetables assist in reducing viral loads specifically among individuals living with HIV/AIDS (Olembe *et al*, 2005; Kimiye *et al*, 2007). Kimiye (2007) argues that the way in which traditional leafy vegetables are prepared is very important as it has a significant impact on the final nutritional taste and value of traditional leafy vegetables. Furthermore, it is imperative to know what form of preparation techniques did communities make use of so as to provide any necessary recommendations and if any efforts must be made.

Traditional leafy vegetables are considered to be extremely important in the issue surrounding food security. The importance of traditional leafy vegetables is going to increase because of the ability that the vegetables have to adapt to the changes in climate and in the local conditions. One challenge has been mentioned when it comes to traditional leafy vegetables and that is they only occur during certain seasons in numerous areas such as Southern Africa and the diversity that is associated with traditional leafy vegetables has been said to decrease, owing to the excessive cultivating of field crops and changes in habitat which includes deforestation.

Knowledge on production, consumption and the attitudes of communities when it comes to traditional leafy vegetables is rare in the Southern African region because of the continuous change in social systems. There are general arguments that have been made that the introduction of “exotic vegetables” has greatly contributed to the decrease in the production and the overall consumption of traditional vegetables. This is as a result of several communities more especially communities located in the urban areas believing that traditional leafy vegetables are vegetables that are consumed by impoverished people only.

The belief that traditional leafy vegetables are only consumed by poor people has created a negative impact on the consumption of healthy crops. This has led to a decrease in the consumption of these traditional vegetables. The aim of this study was to explore the extent to which traditional leafy vegetables were available and how were they used in households located in the rural districts. The second aim of this study was to analyse to what level were households located in rural areas aware of the impact that traditional leafy vegetables had on their nutritional intake and what attitudes did these households have towards traditional leafy vegetables. The third aim of this study was to analyse in-depth on what communication techniques were utilised to ensure that there was enough awareness that was raised on the subject of traditional leafy vegetables through sample surveys. The study made use of the following research appraisal methods that specifically focused on the rural community of Mvuzi Magxeni, Eastern Cape. These methods were questionnaires, focus group discussions and seasonal calendars to make sure both qualitative and quantitative data was collected. Authors such as “FAO (1990), Burkey (1993), Anyaegbunam (1998), Matata *et al.* (2001) and Ngai (2007)”. The above information will ensure that individuals who make policies will be able to come up with better strategies or be able to implement re-strategising efforts in making sure that traditional leafy vegetables are accepted and used in impoverished rural communities.

## **MATERIALS AND METHODS**

### **Study area**

The study was conducted in the village of Magxeni in the Mvuzi administration area. The village is located in the Eastern Cape province of South Africa. It is an hour away from the nearby town of Mthatha, Eastern Cape, South Africa. The village is located in a predominantly isiXhosa speaking province.

### **Sampling technique**

Individuals living in the Magxeni village were selected to participate in the study. The convenience sampling approach was used. This sampling approach was used so as to cover the entire village of Magxeni.

## **DATA COLLECTION AND ANALYSES**

Open ended questionnaires were distributed to each household in the village. The questionnaire would be filled by the head of that household. The data generated from the distribution of the questionnaires was both qualitative and quantitative in nature. Therefore, some of the questions asked in the questionnaires looked at the level of schooling the household head possessed, the money generated by the household per month, and whether or not the household head was employed or unemployed. This data was able to explain the choices made by households in the village when it came to the consumption of traditional leafy vegetables. The open ended questions that were asked served to encourage further conversations around the utilization of traditional leafy vegetables.

Data was collected on the strategies that people living in the Mvuzi Magxeni area used to earn a living, how they accessed services, relationships within the Magxeni community and the dependency that people had on traditional leafy vegetables. To get an in-depth analysis on the perceptions and attitudes that people living in Mvuzi had towards traditional leafy vegetables, research participants were asked to further elaborate on whether they saw traditional leafy vegetables as a good source of nutrition, whether they considered this kind of food to be consumed by impoverished people and how often did they consume traditional leafy vegetables.

## RESULTS AND DISCUSSION

### Demographic and general household information

The results collected from the study illustrated that the most of the research participants were women and this was at 60% and the age group that most of these women were in was between 40-50 years old with other women being under the age of 40 years. Most of the research participants that took part in the study were mostly women. This came as no surprise because traditional leafy vegetables have always been viewed as “women’s food” (HSRC undated). The purposive sampling technique was used. Most households in the Magxeni area had 6-8 people living in the household. Most individuals living in the Magxeni area relied on child support grants and old age pensions which means they survived on an income of less than R1200 a month.

### The availability of traditional leafy vegetables

Villagers started a community garden where they came up with a seasonal chart that illustrated the traditional leafy vegetables that were cultivated and the time whereby they would become available. The time whereby traditional leafy vegetables were most abundant and available was in the month of January, which was as a result of the plentiful rain produced in the summer season. In the Southern African region, summer begins during the last days of October and will end in March. When February comes into effect, traditional leafy vegetables are not as available and in huge quantities as they were in January which owes to the decreased rainfall and a decline in the temperatures. During, the month of March traditional leafy vegetables get taken out of the field as numerous villagers begin to prepare themselves to plant beans as they grow on moisturised fields. Throughout the winter season which starts from the month of May and ends on the month of August, traditional leafy vegetables are not cultivated meaning that they are unavailable. In October when the summer season begins, traditional leafy vegetables such as pumpkin leaves begin to make their appearance as they are merged with several other crops like maize. This is why they begin appearing in the community during this period and becoming available.

**Figure 1:** Leafy vegetables.



### Methods of preparing traditional leafy vegetables

A majority of households in the Mvuzi Magxeni administration area opted to fry their traditional leafy vegetables as children living in the household wanted these vegetables prepared that way and fried and or they would not consume them. In most households in the village, the children were the ones that were responsible for cooking hence they were able to prepare these traditional leafy vegetables their own way. People that boiled and fried traditional leafy vegetables mentioned that they only boiled them for a small amount of time, following the boiling and the frying of these vegetables, they were drained and the water was thrown away. Lastly, these traditional leafy vegetables were fried.

Therefore, boiling traditional leafy vegetables for a small amount of time or frying them for a small amount of time is the most correct method for cooking traditional leafy vegetables as argued by Kimiywe (2006).

Kimiywe (2006) stated that cooking traditional leafy vegetables for longer than 10 minutes will have an impact on the nutritional content of traditional leafy vegetables. However, additives that are able to provide fat mediums were allowed.

## **COMMUNITY ATTITUDE AND EFFORTS TO PROMOTE TRADITIONAL LEAFY VEGETABLES**

All the surveyed households disagreed that traditional leafy vegetables are a food linked to poverty and that they're "toxic" – they did, however, mention that traditional leafy vegetables usually grow with toxic plants that resemble them. The rural household surveyed, the support group and the community garden members view traditional leafy vegetables as highly nutritious and an imperative source of food and, as a result, majority of the respondents preferred traditional leafy vegetables over the exotic ones. Furthermore, the majority of children also preferred the traditional leafy vegetables although some did express their liking of meat and maas (sour milk). The low levels of traditional leafy vegetable consumption among children compared to adults is consistent with report Kwapata (1997), who reported that the younger generation disliked the vegetables due to unfamiliarity of the tastes and their unknowingness of methods of preparation for the vegetables and the vegetables' nutritional benefits. Overall, the community, both old and young, had a positive attitude toward traditional leafy vegetables.

The study indicates that interpersonal communication channels of family and social networks are stronger than the mass media in influencing attitudes and behavior change in relation to traditional leafy vegetables thus indicating the role of indigenous knowledge. The positive attitude and behavior the participants had on traditional leafy vegetables was influenced by families and local clinics. The findings illustrated that although modern influences and the ever-changing social structures, households still obtain indigenous knowledge about the traditional leafy vegetables and share them among each other as well as influencing the younger generation. The findings also showed that sharing knowledge is important in fostering and preserving indigenous knowledge rather than inappropriate media awareness.

## **CONCLUSION**

It can therefore be concluded through the study that many households in Mvuzi Magxeni showed an immense amount of knowledge about traditional leafy vegetables; they enjoy consuming the vegetables and prefer them over foreign vegetables. The sample didn't view the traditional leafy vegetables as "poverty food" or as "toxic" as the vegetables are commonly viewed. Seasonal moisture availability variations, competition from higher value crops and soil fertility problems affect the availability of the traditional leafy vegetables. Their availability has also been declining over the years thus indicating a need for preservation due to their shown importance in household food security. Appropriate nutrition education and communication strategies are needed to help change attitudes and behavior on consumption of traditional foods among youth. These strategies need to address food culture relating to indigenous knowledge, nutrition, production, processing, preparation and marketing. A crucial component of the traditional leafy vegetable promotion strategy should be the development of expanded and preservation programmes and recipes including traditional and modernized ways of preparing the traditional leafy vegetables in a healthy and tasty way through addition of diverse healthy ingredients that appeal to the youth of South Africa.

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# DIGITAL BUSINESS TRANSFORMATION: TOWARDS AN INTEGRATED CAPABILITY FRAMEWORK FOR DIGITIZATION AND BUSINESS VALUE GENERATION

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## ABSTRACT

*The recent successes recorded in digital customer engagement and robotic process automation are prime examples of how digitization has positively impacted organizations productivity and performance. The problem is that digitization is not cheap, and digital business transformation initiatives are failing due to the existing gap in the understanding of the mechanism through which firms attain business value from technology. More than technology, organizational readiness accounts for digital transformation success. Organization readiness refers to the ability to harness and orchestrate core organizational capabilities, namely; resource capability, process capability, and cultural capability in an integrated manner. This paper aims to examine the impact of resource capability, process capabilities and cultural capability on successful digital transformation.*

**Keywords:** digital business transformation, resource capability, process capability, cultural capability, value generation.

## INTRODUCTION

In both speed and intensity, digital technologies are transforming the structure of social relationships in both the consumer and the enterprise space. These technologies are also reshaping traditional business strategy as modular, distributed, cross-functional, and global business processes that allow work across time, distance, and national boundaries (Matt, Hess & Benlian, 2015). This trend will continue, especially, as agility in organizational structures and information systems becomes an essential capability for enterprises as they are interacting within a highly dynamic environment with innovative endeavors to disrupt their industries and markets, or at the least prevent being disrupted. (Urbach, Drews & Ross, 2017; Bharadwaj et al., 2013).

The resulting changes from the accelerated rate of technological innovation and adoption, and the performance outcome from the exploitation of technology trends such as robotic process automation (RPA), social media, mobile, analytics, cloud computing, and internet of things (SMACIT) significantly influence processes, products, and services. Robotic process automation (RPA), for instance, is not only affecting cost reduction but also driving the development of the “digital workers” of the future with its demonstrable result in the efficient delivery of routine tasks, and its potential to learn machinal. Cloud computing has moved from aspirational discussion to a must-have technology for every enterprise in 2019, because as Kahre, Hoffmann and Ahlemann (2017) observed, cloud-based models provided enterprises with something more adaptable and scalable by leveraging automation and modern enterprise applications. The extent to which information technologies are applied to realize efficiency, business effectiveness and innovation is, expectedly, exponentially more significant in the future. (Bock, Iansiti & Lakhani, 2017; Urbach, Drews & Ross, 2017).

The potentials for business value generation through digital transformation is promising, but they do not come cheap, and worst still digital transformation initiatives are failing. In 2019 alone, according to IDC estimate, spending on digital transformation will exceed the earlier projections of US\$2 trillion to about US\$3.8 trillion, of which spending on digital transformation technologies will account for 40 percent of all IT spending (Ferranti, 2019). Hence, investment in IT continues to represent a significant proportion of capital outlay, adding another layer of

difficulty to the already existing organizational hurdles in making a case for investment in transformational technologies.

Notwithstanding, organizations can rarely exercise choice not to invest substantially in IT, even when by the dominant econometric appraisal standards, they struggle to find demonstrable bottom-line justification. To avoid being disrupted by nimbler competitors, companies are innovating and reinventing themselves at a faster rate than ever and experimenting with new digital services and capabilities to augment their existing offerings or to slide into adjacent markets. It is hard today to find an enterprise that is not leveraging some combination of cloud, analytics, artificial intelligence, and machine learning to serve customers better or streamline operations. So that, in response to the changing business environment, some businesses for strategic reasons continue to make considerable investments in digitization.

Considering the high percentage of capital investment, and the high level of dependency of organizations and businesses on information systems and information technology, the general expectation is that these systems should improve the firm's competitiveness in the marketplace (Jafari, 2014). However, while IT expenditure trends at a geometrical progression, the investment benefits, on the contrary, is not keeping pace as evidenced in the scale of high-profile digitization failures which translates into business value slippage. The Wipro digital survey of 2018 indicated that many digital transformation projects were either failing outright or in danger of failing. While half of senior executives polled by Wipro Digital believed that their companies were not successfully executing 50 percent of their digital transformation strategies, one in five referred to their digitization effort as an outright waste of time. The survey established that digital transformations are lagging or even failing for several reasons ranging from lack of agreement on what digital transformation means to lack of organizational readiness for change.

Nothing today points to a fundamental departure from the preceding Wipro research conclusions. Lack of organizational readiness for change is a classical definition of the underlying causes of digitization failure over time. Therefore, even when progress has been recorded of late in the output-focused customer access, engagement, and relationship transformation using digital, organizations have not kept pace with building the necessary capabilities in operations, IT-business relationships, vision, and governance required for digital business transformation to succeed. This suggests that digital transformation failures are a function of mostly organizational factors. On the aggregate, it has been traced to a wide range of organizational factors from poor planning and delivery, organizational culture, and lack of exploitation of the potentials offered by IT. So that as it stands today, digital business transformation is already failing for reasons which are apparent but often ignored, historically. However, before delving into these critical transformation success factors, an understanding of the concept and the problem with digital business transformation is important.

**What is digital business transformation?** Digital business transformation means many things to many people depending on their point of reference in the enterprise. Rob Llewellyn (2018) argued that digital transformation is not about digitizing old ways of working. Instead, it is transforming the business to align with the digital economy. Llewellyn differentiated between what is digital transformation and what could be described as technological change. He asserted that while "change fixes the past, transformation creates a new future without the constraints of the past." For this school of thought, "transformation" is the operational word in digital business transformation.

From the preceding analogy, what is mostly understood as digital transformation can only pass for digital change, because Mobile apps, AI-based chatbots, analytics, robotic process automation which is revolutionizing operations, and other digital services are often used to augment existing services. An output-focused business process such as marketing would regard digital transformation as using technology to change the way the company interacts with customers. Incidentally, this is where most organizations are currently in their enterprise digital transformation journey, as most organizations made the most significant progress on customer experience, with sharpened SMACIT strategies and exploitation of digital marketing technologies (MIT-Capgemini, 2018).

Digital business transformation is much more than SMACIT, chatbots, and AI. It entails technology adoption, but beyond that, it also entails process alignment and cultural transformation that the organizations require to meet their agility demands. Digital transformation refers to a fundamental change in productivity, which information



technology happens to be a part. The changes could be efficiency-driven or innovation-driven. Hence, we can talk about "digital business transformation" or a "digital business optimization" as two dimensions of the same enterprise performance journey which IT underpins. For this writing, the working definition of Digital Business Transformation is organizational change leveraging digital technologies and business models to drive differential value creation aimed at enhanced productivity, performance, and profitability. These business values are the underlying benefits of enterprise digitization and have been the three cardinal promises of IT since the introduction of personal computers.

**The problem with digital business transformation.** With the positive results coming out of digital business transformation efforts in recent times, the business value of information technology (BVIT) researchers have reasons, supposedly, to move the discussion on IT business value from the attempt to correlate a linear relationship between IT spend and the organizations financial performance as the sole success parameter, to the acknowledgment of various ways which IT is expected to support businesses today. Instead, technology business management (TBM) and IT business alignment models are back in the discussion. This is because, paradoxically speaking, digitization is failing at a time of quantum leap in technological innovations, and the hope on digitalization to transform business fading. So that as the conclusion of the Capgemini Digital Mastery survey (2018) indicates, many organizations are starting to face the realities of the complexities of their digitization journeys and realizing how challenging successful digital business transformation can be. The research also revealed that governance, skills, and culture are among the major challenges that stand in the way of digital transformation success. The same challenges have trailed all past efforts at digital enablement of business.

In practice, it is a lot easier to find and engage a vendor who can implement a given system, but much harder to prepare an organization to adapt to new technology. There is a distinction between invention and implementation, in the same token the ability to implement (deliverability) does not equal to the ability to utilize (exploitability) the transformation enabling capabilities inherent in the technology. While most of the investments are geared towards technology acquisition that promise to provide the enterprise a market edge against its rivals or enhanced operational efficiency that will exponentially lead to cost reduction, little attention is given to cultural changes and human capital development of the change. The problem with digital business transformation relates less to technology and more to the management of the organizational challenges created by a technological shift. This accounts for the frustration many managers are facing about the difficulty in getting expected results from technology even when they believe in the ability of technology to bring transformative change to the business (Fitzgerald, Kruschwitz, Bonnet & Welch, 2013; Marchand & Wade, 2014). As, Majchrzak, Markus and Wareham (2016) observed, it is not a deficiency of technology that it cannot solve problems all on its own.

Although prior studies showed the interrelationships between specific types of efficiency-driven and innovation-driven digitization strategy and elements of organizational capabilities as resources, process and culture (Chen et al., 2018; Felipe, Roldan & Leal-Rodríguez, 2017; Majchrzak, Markus & Wareham, 2016; Bock, Opsahl, George & Gann, 2012), not many studies have simultaneously evaluated the relationship between these constructs and digital transformation outcome holistically. This has left a persistent gap in existing studies with regards to the mechanisms through which technology generates business value. Previous researches that looked at IT resources discussed IT resources in terms of technical know-how and IT enabling capabilities. There is an absence of materials that investigated the place of resource structuring - orchestration and complementarity - in digitization synergistically. Even less is the number of inquiries into how organizational culture and practices impact digitization and business value generation. There is the need, therefore, to strive to identify the complementary assets and specific configurations associated with success by extending BVIT scholarly focus on the factors imperative to successful digitization and business value generation.

The effort in this paper is to move away from the dominant serial view of change and transformation success metrics to an integrative factor view of digital change and business transformation. In doing so, it is expected that this paper will provide some theoretical insights that can enrich the understanding of IT value generation and encourage the development of potentially promising interventions that could promote digital transformation competence. This paper is not intended to be a "how-to" manual, but an insight into these value generation factors and why they are instrumental in digital business transformation and value realization.

## Integrated Capability Framework: an overview

Successfully incorporating digital technologies requires companies to operate in new ways. According to Westerman, Bonnet and McAfee (2014), only a very few organizations are indeed using digital technologies to drive higher levels of profitability, productivity and performance despite the hype on digital business transformation. The authors attributed it to the absence of the requisite capabilities to use technology to work differently and the lack of attention to the development of the skills on which the planning, execution, and exploitation of digital depend.

Johnson (2018) observed that besides a coherent business model, the intertwining elements of resources, processes, and the willingness to change people more than technology is the key to transformational business growth. The absence of these factors means that the adoption of and adaptation to a digital-based economy will be damaged notwithstanding the far-reaching impact and the current recorded results of the use of digital technologies (Tapscott, 2014). So that as Kane et al. (2015) surmised, it is not enough to acquire and implement the right digital technologies and expect successful transformation, whereas the success of the transformation effort lies in reconfiguring the business, to take advantage of the informational capability that the technology enables.

While capability is reflective of possible and available opportunities that an individual possesses in skills, knowledge and experience, conversion factors refer to the contextual characteristics such as processes and practices that positively or negatively affect an individual's capabilities and functioning (Akbar, Hirani & Richter, 2017). Capability-centric frameworks underscore the need for organizations to not only understand the critical organizational capabilities for growth and survival but also to help organizations to articulate, support and build such unique capabilities essential for a sustainable competitive advantage. Hence, in parallel to competence, it is imperative to attend to the need of developing an ability to produce a desired, repeatable output to a predetermined quality and quantity through enabling processes (Doherty & Terry, 2013).

The integrated capability framework adduced here is premised on the assumption that the ability of an organization to orchestrate its resources and process capabilities will be positively related to its ability to transform itself digitally, and realize benefits from IT investments. The assumption is anchored on the theorem that the combined and complementary use of distinct sets of resources produces an aggregate higher total return than the sum of returns that could have been achieved otherwise if each set of resources were utilized independently, *ceteris paribus* (Woudstra et al., 2017; Hock, Clauss & Schulz, 2015; Tang & Ghobakhloo, 2015; Hitt et al., 2011). A broad understanding of successful digital transformation and differential value creation factors as postulated in the integrated framework, necessitates drawing on a range of theoretical and empirical insights from strategic management, process engineering, and organizational sciences. That is the approach adopted here as advanced in the subsequent sections.

**Resource capability.** In the strategic management field, as Pettigrew, Thomas and Whittington (2002) observed, the human being as an actor has become lost among a flurry of independent variables such that little attention is paid to the impact of the individual and the networks they inhabit within the organization. This observation is particularly true in the field of enterprise information technology decisions, especially in the current digital business transformation dispensation. As technology portends to enable the business, there is a frantic effort at being at the forefront of the adoption of the latest disruptive technology, almost exclusive of other contingent success factors. When a newly acquired technology fails to deliver the expected value, as is often the case, another technology is layered on the old technology to bridge the gap created in business enablement by the previous technology. There is the silver-bullet view of digitization, that once a technology is adopted, the problem is solved.

The focus on hard technology is mostly because IT business value is considered a function of the information systems rather than the totality of the context within which it is adopted and how the system is exploited. However, research has shown that human and organizational implications associated with utilizing new technology which significantly impacts the success or failure of IT investments, are too critical to be overlooked or just ignored (Shahiduzzaman & Kowalkiewicz, 2018; Ching Gu, Hoffman, Cao & Schniederjans, 2014; Coombs, 2012).

While acknowledging the importance of capabilities and competencies in value delivery and organizational performance, most researches that looked at IT resources discussed IT resources in terms of technical know-how and IT enabling capabilities. But more than that, resource capability refers to functional competencies embedded in the ability to perform specific tasks as a result of skills, knowledge, and experience. Firm-level capabilities are often categorized as ordinary capabilities and dynamic capabilities. Ordinary capabilities are mostly operational - doing things right, whereas dynamic capabilities are generally strategic - doing the right things. That reflects the core underpinning of the resource-based view of the firm (RBV), which offers an understanding and explanation of how competitive advantage within firms is achieved and how that advantage might be sustained over time (Teece, 2017; 2014).

Capabilities stem partly from understanding the combination of resources and the leveraging of complementary assets. What a firm does with the resource assets available to it is as important as which type of resource assets it possesses (Hitt et al., 2011). As Hitt et al. (2011) and Wang et al. (2012) argued, a firm's ability to gain a competitive advantage is not guaranteed by resources possession alone but by adequate bundling and leveraging, because only with effective resource management is the full potentials of resources realized. It is important to highlight the difference between output efficiency often expressed in exploitation ability, and innovation ability often embedded in the exploration process, as being two unrelated but complementary organizational resource capability issues. According to Schienstock (2009), "exploration" is closely related with the organization's effort at unique resource development as well as experimentation with new alternatives, while "exploitation" is related with the compelling utilization of the resource assets currently at the disposal of the organization.

Discussing the importance of resource capability in relation to information technology, digitization, and business value generation, Wood, Hewlin and Lah (2011) noted that technology does have its limits not because engineers cannot innovate, but because users cannot optimally use them. In his narrative on the untapped power of IT, Kenneally (2015) asserted that the rate of advancement in technology innovation outpaces organizations capability to leverage it. This situation creates a consumption or value generation gap. The level of value which IT can generate depends on if the system is deployed in such a way that it adequately leverages, in a complementary manner, on the existing organizational business and human resource assets. To buttress this point, the current Big Data hype readily comes to mind. The potential impact of big data as a business driver has gained an evangelical momentum in the marketplace such that organizations across all industries have invested heavily in Big Data initiatives. The result from the empirical study by Gupta and George (2016) positively validated the relationship between Big Data analytics capability and superior firm performance. However, the real-world evidence shows that big data is not a panacea, rather the interpretation of the data which continues to present the biggest challenge (Ransbotham, Kiron & Prentice, 2016). It is increasingly recognized that more qualified information translated into valuable insights meaningful to the management more than more data is what is needed. Embracing technology innovation as Big Data and data analytics in appreciation of its potential for competitive advantage is one thing, but the ability to exploit Big Data to generate business value is another.

**Process capability.** The ability to build new capabilities other than the human resource such as processes is a part of the firm's bundle of capabilities that generate value. While references to the "value and rarity" of resources are often made, not much is argued or established with regards to how these resources influence firm competitiveness. Resources alone do not account for a firm's competitiveness. The ability of an organization to harness and orchestrate its resources and the consequent performance optimization is largely enhanced by the presence of enabling business and managerial processes. Operational efficiency, which is the value proposition of the business process, expectedly provides management with the capability to monitor, analyze, control, and improve the organization's workflow and activities. A smoothly functioning business process consists of an interrelated set of activities designed to transform inputs into outputs (Berman, 2014). Adequately designed and implemented business processes make enterprise operations more efficient while improving products, services, and profits (Gupta, Viyas & Tripathi, 2014).

Empirical research has shown that there are specific characteristics of firms which have transformed themselves into companies that have significantly outperformed others. These firms with significant long-term performance outcomes use technology to accelerate their transformation, not by using technology as a transformative feature in and of itself; instead through the combination of a well-designed process with appropriate technologies, they create sustained business value (Collins, 2001). Project governance process, for instance, owing to its focus and

visibility into the organizational goals, strives to and can align the enterprise technology projects with the long-term strategic goals as evidenced by the empirical studies by Debreceeny and Gray (2013) and Ashurst, C. et al. (2012) which showed that successful IT project value realization is directly related to the maturity of the organizing processes. The inability to properly govern changes presents another kind of problem to business transformation, digitally driven or otherwise, as the translation of vision into action is mostly facilitated by a strong governance structure. As the MIT-Capgemini survey of 2018 shows, organizations aspiring to transform their businesses digitally remain challenged even on that front. So that besides the poor digitization vision and strategy, the survey showed that governance still presents a challenge which organizations face in their digitization journey.

The role of processes in change management notwithstanding, it is worth noting that the direct link between governance process and performance could be nonetheless disputed. Again, owing to the complexities involved in defining and measuring corporate performance, governance process, and productivity improvements, attributing enterprise change success to these factors is often difficult to substantiate. There is no doubt that if clearly defined business processes are absent, out of control and immature, the full potential of the adopted technology cannot be achieved. However, processes alone are not enough to deliver the business value of information technology. Preferably in combination with other success factors such as resources discussed in the preceding section. The interrelationship between resource capability and process capability is aptly summarized by Van Looy et al. (2011). While resource capability, to Van Looy and others, refers to the ability or competence – skills and knowledge- of an organization to achieve targeted result which leads to predictability, efficiency, and effectiveness outcome, process capability on the other hands is the degree to which an enterprise has deployed processes to aid organizations performance. These two organizational assets are complementary and reinforcing. Failures from change result from not recognizing and aligning these two assets, not having adequate processes to underpin organizations change activities, and not adapting the organization's structure and resources to align with the new and often better methods for working brought in by new technology.

**Cultural capability.** Organizational culture has been recognized as an essential and influential factor in analyzing organizations in various contexts, including its importance to establishing competitive and collaborative advantages, and its impact on organizations' long-term performance (Zhang & Li, 2016; Hogan & Coote, 2014; Bock et al., 2012). Hofstede (2010) and Schein (2010) enunciated the basic underlying principles, expressions, and manifestations of organizational culture. To them, organizational culture embodies widespread dominant practices and the underlying assumptions about "how things are done here." Based on these essential embodiments and manifestation of culture, both scholars – Hofstede and Schein - coalesced along a perspective that views organizational culture as a pattern of underlying assumptions, which have been either invented, discovered, or developed by a given group in dealing with its problems, considered to be valid based on the fact that it has worked well enough to be regarded as such, and are as such consequently transmitted as the correct way to deal with such problems. Organizational activities, operations, actions, and practices representing patterns of behavior, are the visible manifestation of cultural values. These behavioral patterns – expressed and observable – do have an impact on organizational performance and in turn, determine its success.

Discussing the impact of organizational culture as one of the situational variables instrumental to the successful implementation of changes in organizations, Latta (2009) argued that organizational change readiness is culturally embedded, fundamental to change process and have moderating effect on organizational change. As Latta (2009, p.28) puts it, "regardless of the strategies and tactics employed to implement particular change initiatives, the impact of these efforts will be moderated by elements of institutional culture." The same author further argued that the moderating effect(s) of culture on change implementation has valence which is capable of either impeding or facilitating the change process, such that depending on the valence, the cultural moderation either creates a positive acceleration or a hindrance that will impact the expected outcome. Organizational culture as a sense-making process helps the employees of a given organization to understand the organizational events and objectives, in turn influencing the innovativeness, efficiency, and effectiveness of the employees (Shahzad, Luqman, Khan & Shabbir, 2012).

Interest in the impact of culture on the development, integration and actual use of information technologies (IT) has been increasing in recent years (Odusanya, Coombs & Doherty, 2015; Ching Gu, Hoffman, Cao & Schniederjans, 2014). This is informed by the realization that cultural traits are known to exert a strong influence on the adoption and delivery of IT at the aggregate enterprise level, but also on how users, on the individual level, interpret

the features of an IT that have been adopted. The analysis of the studies conducted by the aforementioned researchers on the facilitators and inhibitors of IT business value realization, revealed that planned IT benefits had not been realized because of a lack of attention to technical as well as organizational facilitators and inhibitors as culture.

In today's knowledge-based economy, innovativeness is crucial to the survival and growth of businesses. A firm's innovation capabilities are its core competency, which can also be magnified or hindered by organizational culture amongst others factor. Chen et al. (2018) study demonstrated that the greater the fit between an organization's innovation strategy and its organizational culture, the greater the innovation speed and innovation quality. Hence, in digital business transformation, competing on technology alone is not enough, organizations must also compete on culture because it is easier for organizations to formulate innovation and technology strategies than how to implement them. As the MIT-Capgemini 2018 research shows, 60 percent of organizations recognize that organizational culture is the number one hurdle to digital transformation, that digital transformation has more to do with culture than it has to do with technology, and the pressing need to address it.

Owing to the multidimensional understanding of culture as a concept, the role of culture in organizational performance is debatable. This is especially so when organizational culture is treated as a standalone concept. Often what is more discernible than not, is the impact on the organizational performance of the absence or the lack of maturity of organizational culture in any given organization and vice versa.

## **CONCLUSION AND IMPLICATIONS FOR PRACTICE AND RESEARCH**

The paper examined a capability-driven approach to successful digitization and business value generation and argued that it is a product of organizational readiness for change. It postulated that the digitization success and future of digital business transformation would be well served through an understanding of the integrated capability effect. The assumption is that the ability of an organization to harness its core capabilities -resources, processes, and culture- positively relates to its ability to realize benefits from digital transformation investments.

The paper argued that a framework for digital business transformation should comprise of three dimensions that together explicate how (1) resources, (2) processes, and (3) contextual factors lead to the generation of value from information technology. As is mostly the case, there is a genuine intent to transform the business using digital. However, as is also often the case, the intention gets stuck on the technology piece with little or not much thought given to the mechanism of the transformation especially of resource, the underpinning process and the moderating impact of the prevalent organizational practices. It is essential for managers, therefore, that questions surrounding the delivery and exploitation capabilities of an organization and the maturity of the supporting process be answered at the onset if the identified digitization investment objectives and stakeholder values are to be realized.

In the current business environment where technology has become a mass market, bringing in new technology no longer offers an edge over the competition. Both the established as well as the below-the-radar but nimbler start-ups can adopt same or similar technology and faster too. The difference between success and failure depends on the organization's ability to mobilize its resource assets around a shared vision and value. It is essential therefore that managers prior to full-scale immersion in the transformation, evaluate not only the technology but also the organizations cultural and structural disposition to the anticipated transformation, and ensure a level of readiness which transforming the business digitally requires.

By addressing the issue with current digital business transformation practice which is technology driven bereft of organizational and digitization readiness, this paper intended to generate theoretical insights that can enrich the understanding of IT value creation, and proffered an integrated capability approach. The confirmation of the assumptions in the integrated framework postulated in this paper is subject to future empirical research.

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# THE INTERACTIONS BETWEEN COUNTRY-OF-ORIGIN (COO) EFFECT AND PRODUCT CATEGORIES' EVALUATIONS: THE CASE OF AN EMERGING MARKET

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## ABSTRACT

*This study assesses the impact of culture on the perception of COO and consumer decision-making processes in Morocco, as a developing non-Western and North African nation. In general, the findings confirm that product categories from more developed nations receive more positive evaluations than products from less developed nations. The findings from this exploratory study confirm other researchers' conclusions that advanced nations have the highest quality image, and that there is a bias against products from less advanced nations. Managerial implications are also discussed.*

**Keywords:** Country of Origin, Emerging Market, Product Categories, Consumer Behavior, culture.

## INTRODUCTION

Globalization, aided by privatization and liberalization trends, is shaping the economic and socio-cultural environments of the world economies. This pervasive and enduring phenomenon is creating attractive global market opportunities and at the same time creating many challenges to global marketing practitioners. The globalization of markets helps provide new customers and cooperation toward freer trade. The worldwide trend toward economic cooperation has enhanced global competition. Such trends provide the citizens of the participating nations' previously unheard-of access to products from all over the world (*Statistics on merchandise trade*, 2019, <http://www.wto.org>). More than ever, consumers all over the world are able to buy products made in other (non-native) countries.

The Country of origin (COO) label is one of the many factors that affect the quality perception of a product. Typically, the COO label is communicated to consumers by the phrase "Made in (country)." COO can convey either a positive or negative quality perception to the market. Stereotypes about products and nations are formed by consumers through their experiences, hearsay, and myth (Cateora et al., 2019). These stereotypes also become important dimensions and attributes of a product category and are associated with a country's image (Andéhn and Decosta, 2016). Researchers have attempted to define country image as consumers' general perceptions of quality for products made in a given country (Andéhn and Decosta, 2016).

Research findings were reported by Broda and Weinstein (2005) and Kaynak et al. (2000) argue that, in recent years, consumers worldwide have had increased access to a wide variety of products and services from other nations. Researchers (e.g., Usunier, 2006; Samiee, 2011) have identified difficulties related to establishing a solid theoretical grounding for the understanding of COO, including issues relating to the conditions necessary for the effect to occur (Usunier, 2006). Also, some authors (e.g. Nebenzahl et al., 2003) believe that COO needs to be examined on a category-by-category basis, since an overall theory for all products may not be feasible. Therefore, it would be interesting to examine the behavior of the sub-dimensions across a wider range of product categories. Hsieh (2004) also emphasized that it is therefore desirable to conduct further empirical investigations to validate research findings

in a multi-product, multi-origin, and multi-nation context. Therefore, according to Hsieh (2004), it is desirable to conduct further empirical investigation as a means to validate research findings in a multi-product, multi-origin, and multi-nation context.

Additionally, a review of pertinent literature shows that developed countries, mainly U.S. and 'original' EU members, were the most common geographical locations for studies in cross-cultural marketing research. According to Okazaki and Mueller (2007), researchers have ignored the African regions/cultures. Given the recognized global impact that culture has on the marketing strategies and practices, this western framing preference may lead to incomplete marketing practices outside the U.S. and Western Europe (e.g., Okazaki and Mueller, 2007).

## **RESEARCH GOALS**

In light of the aforementioned evidence, one goal of this study is to assess the impact of COO on consumers from a North African and Mediterranean culture and an emerging market (i.e., Morocco). This research study implements a culturally based approach to explain the extent of the effect of COO image on product categories within a multi-nations context.

Considering this research need, the focus of this exploratory study is to assess how respondents from Morocco compare products originating from the U.S. versus other countries. Our study provides some of the first known empirical evidence regarding a comparison of the COO impact and establishes the link between countries and multi-origin product categories within the Moroccan consumers' framework. The study's results offer international business organizations' executives with a better understanding of the consumer mindset of their Mediterranean/North African (i.e. Moroccan) market.

This study assesses the impact of culture on the perception of COO and consumer decision-making processes in Morocco, as a developing non-Western and North African nation. Morocco works with the U.S., the European Union (EU), and other nations on trade issues within the World Trade Organization (WTO), the U.S.-Morocco Free-Trade Agreement (FTA), the European Union (EU) Association Agreement, and trade treaties with other countries. These initiatives toward market openness and trade liberalization make Morocco an attractive destination for direct foreign investments by international firms. As international trade and business opportunities continue to expand in Morocco, U.S. businesses will increase commerce in Morocco. This presents an exciting challenge to coordinate business and marketing-mix strategies such as product policy, pricing, distribution, and communications.

## **FINDINGS & DISCUSSION**

In general, the findings confirm that product categories from more developed nations receive more positive evaluations than products from less developed nations. The findings from this exploratory study confirm other researchers' conclusions that advanced nations have the highest quality image, and that there is a bias against products from less advanced nations. In general, these findings show that product categories from more developed nations receive more positive evaluations than products from less developed nations. Furthermore, these findings are in support of similar results reported in the existing literature (e.g., Cateora et al., 2019). Based on these findings, we can conclude that there is a general bias in that the more technical the product, the less positive the perception of the quality of the product(s) made in a less developed nation(s) or nation(s) in the process of industrialization (see Cateora et al., 2011; Kaynak et al., 2000).

This may be beneficial to marketing academicians and practitioners in understanding the underlying reasons and explanations for the differences in consumer preferences and to set more appropriate marketing strategies.

These results have managerial implications in assisting multinational organizations in their market segmentations and positioning strategies. Specifically, they can segment the market of Morocco and other African and Mediterranean nations, based on the sourcing countries. From a managerial perspective, understanding country/cultural context will contribute to the success of a business organization's overseas operations. This

understanding will help show how respondents from a non-Western, Mediterranean/North Africa country and culture (i.e., Morocco) evaluate product categories from various nations on specific dimensions.

In particular, acquiring this type of understanding can assist business/marketing managers (e.g., Chinese/Asian, U.S., and European business managers) to be more in-tune with the realities of their international (i.e., Morocco) business environment. The motivation behind this aim is the established belief that Morocco may serve as an example of other Mediterranean/North African countries. As these findings demonstrate, COO does influence product category evaluation.

However, it faces the same limitations as with any other survey research. For example, participants were given only verbal references to the product categories under investigation. This was done in lieu of showing an actual product category (i.e., respondents evaluating quality of intangible product category rather than quality of tangible product category). This is an area that may be of interest for further research. The use of convenient samples limits the generalization of the findings. That is, nonprobability sampling (e.g., convenience sampling) selection is often used by researchers due to convenience, availability, and custom (Reynolds, et al., 2003). Though the external validity of research results can be a concern, our exploratory research study results remain relevant to practitioners and academicians alike.

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# DEMOGRAPHIC FACTORS AFFECTING EMOTIONAL INTELLIGENCE LEVELS: A STUDY ON HUMAN RESOURCES MANAGERS IN TURKEY

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## ABSTRACT

*Human Resources (HR) professionals can make a greater impact in the workplace and add value to HR services they provide through emotional intelligence. This study explores the impact of some demographic factors (i.e., gender, age, work experience) on HR managers' emotional intelligence levels. Using a questionnaire survey, pertinent data is gathered from 140 HR managers who are the members of People Management Association of Turkey (PERYÖN). The results of the study show that age is a factor affecting emotional intelligence of HR managers negatively and most HR managers in Turkey are young (under 41 years old), female professionals who have less than 10-year work experience and possess high level of emotional intelligence.*

**Keywords:** EI, HR Managers, Human Resource Management, Age, Gender, Work Experience.

## INTRODUCTION

In the knowledge age, or the information age, information and intelligence has become the raw materials as did iron and coal in the Industrial Age (Ershova, 1998). As the pressures of new trends that technology brought such as global competition, the changing nature of work, Web 2.0 (user generated content) increase, the companies and the way they work are changing. The pressures to compete with emerging and maturing global markets have forced organizations to examine their entire business model from top to bottom and find new ways to cope with the change.

Emotional Intelligence (EI) has the potential to protect organizations from failing due to competition. This can be accomplished through the application of EI competencies that come from self-awareness, self-regulation and more (Goleman, 1998). People with a high degree of EI are more successful and happier at work since they are able to build better relationship with colleagues and superiors. As a result, they have higher work satisfaction.

The purpose of this study is to investigate demographic factors affecting emotional intelligence. More specifically, this research intends to explore if age, gender, work experience and number of reporting employees have an impact on emotional intelligence levels of HR managers in Turkey. Therefore, it addresses the following research questions:

- Does age have an impact on EI levels of HR managers in Turkey?
- Does gender have an impact on EI levels of HR managers in Turkey?
- Does work experience have an impact on EI levels of HR managers in Turkey?

# LITERATURE REVIEW

Although a significant body of literature exists on the demographic factors affecting emotional intelligence, studies on HR managers are very limited. The literature review pertinent to this study is drawn from the three sections: emotional intelligence (EI), human resources management (HRM) and studies on demographic factors affecting EI.

## Emotional Intelligence (EI)

Broadly defined, EI represents a set of competencies for identifying, processing, and managing emotion (Zeidner, Roberts & Matthews, 2008). The concept of emotional intelligence (EI) was first introduced about 24 years ago by Daniel Goleman and has been defined by different researchers in different ways. All these definitions have a common ground which describes EI as the ability to understand and manage one's own emotions and the emotions of others (Salovey & Mayer, 1990; Bar-On, 1997; Goleman, 1995 & 1998; Mayer et al., 2002).

EI is a concept which had its roots from Social Intelligence. In 1985, first Payne and then in 1990, Salovey and Mayer defined it as a type of social intelligence which help people analyzing their own and others' emotions. It has gained a huge popularity in the media and business world during the last two decades and it has seen as revolutionary paradigm shattering idea since it was popularized Daniel Goleman in 1995.

Payne (1985) indicated that EI is considered as a person's ability to relate to fear, pain and desire. Five years later, Salovey and Mayer (1990) proposed the Four-Branch Model which suggests four types of components: the use of emotions to enrich thinking, perceptions of emotions, emotional management and understanding of emotional meanings.

In 1995 Daniel Goleman popularized the term with his book *Emotional Intelligence: Why it can Matter more than IQ*. In this book, he stated early on that he was concerned about the other characteristics that make up EI and simply defined EI as being intelligent about emotions. According to Goleman (1995), EI refers to how well people handle themselves and their relationships.

Goleman's next book, *Working with Emotional Intelligence*, focused on how to apply EI to our careers and how businesses can apply it for success. This was in reaction to the huge response to his first book, *Emotional Intelligence*. In an analysis of 181 positions in 121 companies worldwide, Goleman (1998) found that two out of three competencies that were essential for a given job were emotional competencies.

## Human Resource Management (HRM)

Human resources are defined as firm's knowledge, experience, skill and commitment of the employees to the firm; their relations with each other. They are the most important firm asset, the ones that research, design, project and differentiate the firm from other firms (Qehaja & Kutllovci, 2015). The founder of modern management, well-known Peter Drucker (1973) has strongly said that business firm or any other institution has only one real resource— people. "...human resources have always been critical to the success of an organization; their importance has been always grown and this fact is recognized from within and outside organizations."

Porter (1985) emphasized the role of Human resources (HR) as creator of competitive advantages at any firm. In recent years, management schools have begun to appreciate the importance of human resources as a source of competitive advantage. According to this perspective, which is known as resource-based view, firms recruit critical HR and then establish HR systems that increase their potential. People and developed systems are difficult to be copied by competitors, so they provide a source of sustainable competitive advantage. HR researchers and managers for a long time have emphasized that the HR function plays a vital role in the performance of the organization. Most firms in their annual reports stress that people are the main asset of their firm.

Michael Armstrong (1999) in his book *A Handbook of Human Resource Management*, described HRM as: a strategic approach which reflects and supports the core values of the firm, shapes its culture and ensure its success.

Farndale & Paauwe (2004) stated, “A company is only as good as its people, and human resource management (HRM) practices have been identified as a source of competitive advantage.

## **Studies on Demographic Factors Affecting EI**

There are many studies which examined the influence of demographic factors on the EI of different professionals. A few studies have identified that age is a factor affecting EI positively (Schuttle et al. 2007; Bennett et al. 2007). While an American study involving 405 participants aged between 22 and 70, found that EI increased slightly with age (Farisalli et al. 2006), the findings in more recent literature suggests that there is no significant relationship between age and EI (Gurol et al. 2010).

There are studies that have reported women to be more socially skillful compared to men. An Australian study exploring the work stress and EI of mental health nurses found that female nurses with less experience in mental health had lower EI. This was not the case however in the male participants (Humpel & Caputi, 2001). High EI among women has been attributed to biological and social factors. The biological factors include the larger size of the brain area, which processes emotions, in women compared to men (Gur et al. 2001).

The longer the time spent in the profession, the greater the experience, adaptability and knowledge that is gained by the individual. In this regard, it is deemed logical that individuals with more work experience possess higher levels of EI than those who are novices to the respective profession. According to Jorfi et al. (2011), employee work experience is positively related to EI meaning that EI increases with the number of years one has served in a profession. This finding is supported by Kumar and Muniandy (2012) who found EI to significantly vary with lecturers’ teaching experience. However, Sergio et al. (2015) argue that work tenure, which translates to work experience, has no significant relationship with the EI amongst call center employees in the Middle East, Iran, Pakistan, Russia, India and the Philippines.

## **METHODOLOGY**

In this study, main purpose is to investigate the role of some demographic factors on HR managers’ EI levels. The data is gathered from 140 HR managers who are the members of People Management Association of Turkey (PERYÖN) using a questionnaire survey. HR managers in this study are defined as HR professionals who have at least two or more employees reporting to them. The data gathered is analyzed using Microsoft Excel and SPSS. First, descriptive statistics including frequencies, percentages, means and standard deviations were obtained. Then, t-tests, ANOVA and Mann-Whitney U Tests were conducted. Also, the differences obtained through ANOVA among the means are further compared through Tukey Post-hoc Tests.

## **RESULTS AND DISCUSSION**

### **The Profile of Study Participants**

This section presents the demographics of the survey participants as shown in Table 1. The demographic profile of study participants, to a certain degree reflects the characteristics of the HR manager population in PERYÖN. The majority (62.1%) of the HR managers who participated in this study are females while 37.9% of them are males. Over 75% of HR managers are under the age of 41 and only 2.9% of them are over the age of 51. The age group of 31-41 is the largest, representing 51.4% of respondents, followed by 24.3% of respondents who belonged to the age group of 21-30. On the other hand, 21.4% of respondents fall in the age group of 41-50.

Among all the HR managers surveyed in this study, 30% had 3 years or less work experience, 42.9% had 4 to 10 years and 27.1% had 10 years or more (See Table 5.3). The majority of the research participants (72.9%) have less than 10 years of experience in HR, which can be explained that HR managers in Turkey are relatively young and have not been in the workforce for a long time. These findings support that HRM practices in Turkey are usually done by young women in organizations (Aycan, 2001). The reasons why women in Turkey prefer human resources as a

career field might be their management, organization, problem solving and communication skills. When we look at the social structure of Turkish families, we can see that women oversee coordinating and organizing roles.

**Table 1: The Demographics of Study Participants.**

Demographic Factors		Frequency(%)
Gender	Female	87 (62.1)
	Male	53 (37.9)
Age	21-30	34 (24.3)
	31-40	72 (51.4)
	41-50	30 (21.4)
	50+	4 (2.9)
Years of Experience	3 years and below	42 (30)
	4 to 9	60 (42.9)
	10 years and more	38 (27.1)

## HR Managers' Emotional Intelligence Levels

Table 2 represents measures of central tendency and variability according to four WLEIS dimensions and total EI score. Since the average of all participants' emotional intelligence scores are close to maximum scores, it can be said that most HR Managers participated in this study have high emotional intelligence levels in terms of four dimensions and total score. The researcher took median value as a cut-off point since the distribution is skewed to determine the exact percentage (55%) of HR managers with high EI.

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The highest mean value (24.25) belongs to Self-Emotions Appraisal dimension while Regulation of Emotion has the lowest mean value (22.26). This means the study participants' ability to understand and accept their own emotions is better than their ability to control them. A possible reason for this might be Turkish culture and business structure. In Turkey, there are many small or medium-sized, family owned companies and nepotism is very common. Although globalization has changed company dynamics, the business culture is still very personal in most organizations.

**Table 2: Summary Statistics of Participants' EI Scores.**

WLEIS Dimensions	Mean	Median	Standard Deviation	Minimum	Maximum
Self-Emotions Appraisal	24.25	24	2.81	14	28
Regulation of Emotion	22.26	23	3.82	7	28
Use of Emotion	23.65	24	2.91	15	28
Others' Emotions Appraisal	23.49	24	3.12	13	28
Total Score	93.64	94	10.36	64	112

## The Relationship between Demographic Factors and Emotional Intelligence

The study findings indicated that only age ( $F=3.985$ ,  $p=0.021$ ) out of 4 manager related demographic factors investigated (gender, age, work experience, number of employee reporting), is found to be a significant factor on overall emotional intelligence levels of HR managers. The significance levels (p-values) obtained through t test and ANOVA for manager related demographic factors presented in Table 5.3 below.

**Table 3: The relationship between demographic factors and EI: p-values.**

Manager Related Demographic Factors	Self-emotion appraisal	Emotion appraisal of others	Regulation of emotion	Use of emotion	Total WLEIS Scores
Gender	0.590	0.240	0.455	0.218	0.346
Age	0.166	0.001*	0.112	0.071	0.021*
Work Experience	0.994	0.739	0.715	0.973	0.803

\*  $p<0.05$ , significant relationship

Based on the research done on demographic factors affecting EI, there is a relationship between age and EI in most studies. In the late 1990s, some studies showed that older people possessed high levels of EI compare to younger people. This made the researchers assume that emotional intelligence can be learned and increase with age (Bar-On & Handly, 2003). Later, the results of numerous significant studies conducted on EI by Bar-On, 1997, 2002; Mayer, Caruso, & Salovey, 1999; Mayer, Salovey, & Caruso, 2002 supported this assumption. However, there are some more recent studies which resulted in no significant relationship between age and EI such as Oztimurlenk, 2012 and Yogun and Miman, 2016.

In this current study, HR managers who belong to the age group 21-30 years have higher EI levels than HR managers who belongs to the age group 31-40 years. A possible reason may be the changing nature of world and social values. Younger managers usually work by thinking and communicating in the team environments since they grew up with technology and the tools it offers. That world requires them to learn more on the concepts such as EI that might help improve their communication skills by reading, doing more research or participating more seminars and training programs. Therefore, they became more conscious and knowledgeable about EI.

Another finding of the study is that the HR managers' gender and work experience are not found to be significant for none of the emotional intelligence levels ( $p>0.05$ ) (See Table 3). Gender as a factor affecting Emotional Intelligence have been investigated by various researchers. Researchers like Goleman (1998), Bar-on (2000), Petrides and Furnham (2000), Alumran and Punamaki (2008) proposed that Emotional Intelligence did not vary with gender while researchers like Brackette and Mayer (2003), Palmer et al. (2005), Mandell and Pherwani (2003) indicated that Emotional Intelligence is different among men and women.

As with respect to work experience, the study findings concur with some of the previous studies (Oztimurlenk, 2012 and Yogun & Miman, 2016) nevertheless, in some other studies the impact of working experience on EI has also been noticed. A study carried out by Adeyemo (2008) among 215 workers in selected organizations in Oyo State in Nigeria indicated that work experience has significant predictive effects on emotional intelligence. Another study conducted among 90 executives in India also found work experience to be positively associated with EI (Mishra and Mohapatra, 2010).



## CONCLUSION AND FUTURE RESEARCH

The findings of the study show that age is a factor affecting emotional intelligence levels of HR managers negatively and most HR managers in Turkey are young (under 41 years old), female professionals who have less than 10-year work experience, 2-5 employees whom they supervise and possess high level of emotional intelligence. This provides organizational leaders with a perspective of age differences regarding emotional intelligence. Information age have created new knowledge, skills and ability requirements for HR managers. Ongoing developments in technology are reshaping HR activities done by HR managers in organizations. Therefore, proper training should be offered to older HR managers on emotional intelligence.

Due to a number of constraints such as time, this study has the following limitations that can be addressed in future research. First, this study focused on only four demographic factors (i.e., age, gender, work experience, number of reporting employees) and their impact on HR managers' emotional intelligence. Factors such as education, company size, industry type, position, should all be considered in future research. Secondly, the study findings are obtained from HR managers in Turkey who are the members of PERYÖN. To enhance the generalizability of them, future research should be conducted in other countries (e.g., USA, Canada, and Australia) which have more large companies and analyze all HR managers in those countries rather than only members of a specific HRM association

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# LEADERSHIP IN CORPORATE CITIZENSHIP IN GLOBAL MARKETS: INSTITUTIONS, ACTORS AND INTERNATIONAL ACQUISITIONS

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## ABSTRACT

*This paper examines the input and impact of individual top-level corporate leadership actors in the context of national institutions encountered amidst the implementation of a global corporate citizenship, social responsibility and sustainability program in the context of strategic and social innovations and internationalization through mergers and acquisitions. National institutions, individual actors, and a simultaneously enacted international perspective on corporate citizenship and corporate social responsibility alongside an international acquisition program together underscore the value of a top leadership/ individual actor-centric approach to institutionalism. This leadership perspective enhances an understanding of global strategy from developing economies investing outward into both developed and developing markets. We highlight our findings based on analysis of the internationalization of an increasingly global firm and industry leader originating from an emerging-markets setting.*

**Keywords:** Global markets, corporate citizenship and social innovation, leadership, corporate social responsibility, internationalization and institutions, emerging markets.

## CORPORATE CITIZENSHIP, ACQUISITIONS AND INSTITUTIONAL CONTEXT

At the collective institutional and individual leadership levels, our analysis addresses how state and regional institutional considerations can affect the enactment of both mergers and acquisitions (henceforth, acquisitions and sometimes also known in the vernacular as M&A) and corporate citizenship, sustainability and social responsibility—a broader and more inclusive conceptualization drawing on the top leadership dynamics and forces for positive social contributions in accordance with global ethical and legal understandings, often in accordance with guidelines and principles from the United Nations. Institutional factors have been explored in previous scholarship separately for acquisitions and corporate citizenship and social responsibility. We join the two domains in combination with leadership-centric understandings within an institutionally embedded global perspective. From our perspective, top corporate leaders are the individual actors embedded at the apex of organizations. They can be referred to as individual actors and also more specifically in our analysis we rely on their upper management responsibilities as well as part of the driving force in setting the tone for national, international or global corporate citizenship conduct and outreach.

We additionally draw on complementary global strategy, strategic intent, and transnationalism perspectives to understand corporate conduct at the intersection of acquisitions and corporate citizenship and social responsibility outreach efforts such as involving community-level engagement. As firms internationalize via acquisitions, varying national and regional practices intermix and influence corporate citizenship and social responsibility initiatives differentially. As state and regional institutions transform in relation to participation in global markets,

institutionalized practices within firms—under the leadership of top corporate executives—adapt to new market pressures and in response to community interests and environmental concerns as mediated by individual top leadership actors, serving as actors in the institutional sense of the word as playing roles in the codification and routinization of, for instance, corporate governance, economic, environmental, and currency and stock market rules and regulations. We examine this interplay in the context of a global firm originating in the emerging markets setting of the countries of the economic single market of the Gulf Cooperation Council in the Arabian Gulf region.

## **TOP CORPORATE LEADERS, CORPORATE CITIZENSHIP AND ACQUISITIONS IN NATIONAL CONTEXTS**

In drawing on evidence from an empirical case analysis of an emerging market multinational company (EMNC) that has expanded through both acquisitions and corporate citizenship and social responsibility, we also draw on established research of corporate citizenship and corporate social responsibility and sustainability behavior with supporting pillars typically viewed as relating to ethics, employees, environment, community engagement and also global concerns (Kurland, 2017; Mostovitz, Kakabadse, & Kakabadse, 2011; Scherer & Palazzo, 2007). Corporate citizenship initiatives in the focal global logistics firm have evolved to support these multiple pillars in social responsibility and sustainability, as facilitated and strengthened through acquisitions. An intensive acquisition program helped the firm to obtain technology, personnel, and innovation resources to establish a corporate citizenship and social responsibility program that has become internationally renowned. The focal firm of the case analysis has had a consistently strong financial performance, while also connecting effectively into communities worldwide at a social responsibility and sustainability level, demonstrating awareness of individual actor input and impact at the local community level and as encouraged by both top corporate leaders and the organizational leaders at the national and divisional levels. Specifically, the focal firm developed a world-class, globally outreaching corporate citizenship and social responsibility program, attending to communities around the world where the firm does business and with rapid responsiveness anywhere in the world for large-scale natural disasters. The firm became notable in both global corporate citizenship and social responsibility and global expansion.

Our data derive from management interviews, observations, and corporate documentation from field research conducted over the five years from 2012 to 2017 in the six economically interconnected countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE) of the Gulf Cooperation Council of the Arabian Gulf region of the world. The focal firm has expanded outward from this home region and has become a multibillion-dollar enterprise having offices and doing business in over 100 countries of the world. In examining institutions, acquisitions and corporate citizenship starting from the Middle East, we heed the call from Matten and Crane (2005) and Jormanainen and Koveshnikov (2012) to expand the boundaries of corporate citizenship and social responsibility scholarship. Specifically, we venture into geographic and economic regions that have been less examined and that can supplement and enhance our current understanding of acquisitions and corporate citizenship and social responsibility joint development from individual actor and national institutional perspectives in a global context where issues of power and conflict abound (Hirsch & Lounsbury, 2015). We summarize the methodology here in reinforcement of individual actor perspectives and influences in interaction with national institutional settings and with global strategic intent.

## **COMPARATIVE NATIONAL INSTITUTIONS AND CORPORATE LEADERS AS INDIVIDUAL ACTORS**

Leader-centered institutionalism plays a crucial role in comparing national institutions for instance, in the realms of financial rules and regulations, codes of corporate governance (Aguilera, Judge, & Terjesen, 2018), and conventions for professional conduct embedded in multiple contextual realities (Geppert, Matten, & Williams, 2003). With respect to professional conduct, corporate citizenship and social responsibility represents conduct oriented toward fair and favorable practices in terms of employees, ethics and the environment. It is a form of professional norms for organizations and as with much of institutional theory, the emphasis has been at the collective level. Here we refer

again to the upper level of top corporate leaders, who can influence corporate conduct and standards and can arguably set the tone for a corporate citizenship stance in accordance with or sometimes even orthogonal to national institutions.

Individual actors interact with institutional contexts and actors and institutions contribute to mutually shaping and influencing each other. As noted in previous research, institutions are never fully deterministic of actor identities and choices (Aguilera & Jackson, 2003). Rather, actors exercise individual prerogatives for actions based on a variety of individual identity and motivating factors. Through a qualitative research approach, we have assessed processes and interactions around the roles, voices, and impacts of individual leadership actors in determining and implementing corporate citizenship initiatives. These social responsibility and citizenship initiatives occur within an international acquisition program, with the aforementioned leaders guiding both the global corporate citizenship and social responsibility outreach and the international expansion by acquisitions. The leaders—and by extension the corporate citizenship efforts and acquisition program—address the national or regional institutional context where the corporate citizenship and social responsibility program occurs during international expansion and globalization of the focal firm from an emerging markets home region into the world.

While the top leadership has a global and world-class vision for the corporate citizenship and social responsibility program, individual actors managing divisions at the local and regional level have flexibility and voice to provide input for how the corporate citizenship and social responsibility program can best serve and involve local actors at the community level. The national/ regional/ divisional leaders have the decision making latitude and prerogative as well to communicate to the global corporate leadership on the match-up of the strategic initiatives and the corporate citizenship and social responsibility formulation at the more local level of control. As the corporate citizenship and social responsibility program has five essential pillars—including ethical conduct, environmental protections, safeguarding employee development and welfare, community initiatives, and global disaster response—and the acquisition program centers a few key themes—including innovation and internationalization—the corporate citizenship-strategy interactions have scope to vary within individual and institutional interactions within various countries of the world where the focal EMNC does business. These issues involve corporate governance and organizational politics within the EMNC (Fligstein & McAdam, 2012).

## **INSTITUTIONAL THEORY IN CORPORATE CITIZENSHIP, ACQUISITIONS AND LEADERSHIP PERSPECTIVES**

A variety of theoretical approaches within institutionalism have heightened our understanding of key factors such as state and organizational rules, regulations and procedures. Some of these institutional factors are in the financial arena, while others relate to areas of statutory and regulatory concern as well as norms, traditions and behaviors. For instance, globalizing firms under the leadership of senior managers must contend with institutional incompatibilities arising from varieties of capitalism, transitions from various forms of socialism to more market-driven economies, and the challenges of dealing with differing business environments encountered during international expansion. Such factors can affect acquisitions and corporate citizenship, separately and jointly, in organizations and in internationalization situations. In this analysis, we encompass institutional scenarios within a variety of national contexts.

### **Institutional Theory and Factors in Acquisitions**

Multiple institutional stances have furthered our comprehension of acquisitions from a global perspective and as a mechanism of international expansion. Institutional theory highlights cross-border acquisitions as strategies helpful for (1) surfacing competing institutional logics between varieties of capitalism and a more state-influenced organization of markets, (2) navigating institutional transitions to more market-driven economies, and (3) gaining legitimacy and an economic foothold in new institutional environments (Stucchi, 2012).

A segment of the literature has long argued that multinational firms expanding through acquisitions have taken advantage of institutional elements of their home markets, enabling them to build strategic strengths that they then leverage in their competition against MNCs from diverse markets. Typically, this dynamic has been seen as advantaging firms originating from environments with stronger and more stable institutional infrastructure.

Nevertheless, this dynamic has also been argued to advantage EMNCs emanating from home bases with greater institutional voids. These voids can include not only the lack of regulatory, health and educational infrastructure but also, for instance, the absence of financial intermediaries facilitating transactions between buyers and sellers. Dealing with institutional voids has, almost counter intuitively, assisted EMNCs by providing them with a competitively advantageous bootstrapping mentality in the competition against developed market multinationals (Khanna & Rivkin, 2006). EMNCs acquiring firms in developed economies markets and then doing business in those markets have been seen to not only survive but thrive (Stucchi, 2012).

Cross-border acquisitions bring MNCs from a wide range of countries into closer competition in popular markets. National and regional institutional factors then intermingle at global crossroads. For instance, international acquisitions by EMNCs from Africa provide a compelling example of the challenges and benefits of confronting institutional voids and reconciling differential institutional contexts in the drive for international expansion (Ellis, Lamont, Reus, & Faifman, 2015). For the emerging markets of China, institutional theory deepens the understanding of target selection in international acquisitions when the dominant coalition derives more from an older socialist-grounded versus a newer market-driven orientation (Greve & Zhang, 2017). The competing institutional logics from varying influences on strategic activity illuminate the national origin and market power of the targets selected, as noted by Greve and Zhang (2017). Emerging market firms from formerly socialist countries can be more likely to internationalize to the West and to acquire larger firms when influenced by a more market-oriented dominant coalition in the acquiring firm. Not only market capabilities but also an awareness of the importance of institutional shifts in nations transitioning from more state-controlled to more market-driven economies have influenced the success of developed country MNCs making acquisitions in emerging markets such as Russia, India and China (Li, Peng, & Macaulay, 2013). Acquiring firms from both developed and developing markets benefit from understanding the nature of the economic and institutional transitions into the target firms' home markets.

Overall, acquisitions—again as driven by corporate top leadership—can assist firms from both expanding from both developed and developing economies in not only gaining a market foothold but also in acquiring legitimacy in the new institutional environment of any recently entered country (Held & Berg, 2015). Legitimacy in this context pertains to both internal and external perceptions of the authority and appropriateness of the organization and its right to exist, function, and thrive in the focal business environment (DeJordy & Jones, 2008).

## **Institutional Factors in Corporate Citizenship and Social Responsibility**

A variety of institutional and neo-institutional theoretical factors come into play in the design and implementation of national, international and global corporate citizenship. These factors pertain to seeking legitimacy, interrelating state and other institutional actors, and reconciling the boundaries between business and society. Specifically, institutional theory has been applied in efforts to understand corporate citizenship as a mode of economic governance taking over from the failure of state institutions to promote social welfare in liberal market economies (Brammer, Jackson, & Matten, 2012). As a mode of economic governance, corporate citizenship and social responsibility could manifest in the launching of community initiatives (Beddewela & Fairbrass, 2016) to counteract institutional voids at the state level by offering health, educational and housing infrastructure related services to local residents, ensuring fair labor practices, and taking initiatives toward protecting the natural environment. Institutional approaches to corporate citizenship and social responsibility can also mean syncretizing institutional theory, individual actor and stakeholder perspectives, and legitimacy practices toward understanding corporate motivations as well as how and why corporate citizenship, sustainability and social responsibility, even from the same organization, varies from country to country (Fernando & Lawrence, 2014).

Institutional theory and neo-institutional theory, pertaining particularly to organizations and actors within organizations, can help illuminate corporate citizenship evolution and practices in both the global and national domains. For instance, organizations can adopt corporate citizenship programs to simultaneously relate to state and local-level actors and establish legitimacy on a global stage. Firms can use corporate community initiatives as part of an outreach to governments, to supplement institutionalized state-level programs, and mediate at the boundary between business and society. This type of integrated approach facilitates an understanding of a corporate program for corporate citizenship, sustainability and social responsibility functioning as a mode of economic governance stepping in to help preserve, for instance, societal health, educational, and welfare standards even amidst any

shortcomings of state institutions in liberal or coordinated market economies. Multiple types of individual actors, including employees, customers, and community residents, benefit, while the firm reifies its social commitments and gains legitimacy. Institutional theory then interrelates with individual actor-centric perspectives and legitimacy considerations to heighten our understanding of the corporate motivations for and variations among corporate citizenship practices across national contexts.

Firms needing to be seen as legitimate—that is, valid and appropriate—can enact corporate citizenship and social responsibility programs adapted to the needs and interests of local communities. In India and Brazil, for instance, where colonial influences were keenly felt until independence movements arose, separation from the colonizer did not immediately mean separation from the colonizer’s institutional structures and influences. Corporate citizenship initiatives have helped in righting these influences and privileging local talent over expatriate management (Millar & Choi, 2011). In the emerging markets of the African continent, the strategic use of relationship-building language (Selmier, Newenham-Kahindi & Oh, 2015) and a burgeoning adherence to the UN Global Compact (Williams, 2013) have counteracted the former norm of low social-responsibility engagement and have assisted in corporate citizenship, sustainability and social responsibility initiatives toward environmentally sustainable economic development. The UN Global Compact has become a new form of institutionalized structure and practice militating in favor of the symbolic and substantive adoption of corporate citizenship and social responsibility programs by firms around the world (Rasche, Waddock & McIntosh, 2013). Local stakeholders benefit, and global stakeholders—including, customers, investors and suppliers, as well as interested analysts and observers—applaud. We also note that alternative explanations for firm motivation for corporate citizenship, sustainability and social responsibility—such as leadership integrity and standard bearing and the social, cultural, and religious norms influencing a focal firm and its top management—can apply as well (Fehre & Weber, 2016).

## **Institutional Factors in Acquisitions and Corporate Citizenship**

Acquisitions and corporate citizenship, sustainability and social responsibility are interrelated under the *aegis* of institutional theory in ways that have only recently begun to be explored. Global strategy, strategic intent, transnationalism, multicultural management, and individual actor as well as community involvement are examples of key issues entering into the dual domain of analysis. Our explorations of these interconnections are based on current theoretical precepts and practical applications and point to future theoretical and empirical directions.

Institutional theory has long been known to predict tendencies for isomorphism (DiMaggio & Powell, 1983), as organizations struggle to respond to environmental contingencies and can take cues from other (successful) organizations (Hannan & Freeman, 1977, 1984). These tendencies toward isomorphism apply even more strongly to the global in an increasingly economically interdependent and digitally interconnected world (Marquis, Glynn, & Davis, 2007; Raynard, Johnson, & Greenwood, 2015), as organizations position themselves toward a transnational stance off or simultaneous global integration and efficiency and local responsiveness (Bartlett & Ghoshal, 1989). These classic and traditionally distinct perspectives on institutional theory and global strategy have been brought together in the context of acquisitions and corporate citizenship and social responsibility. Miska, Witt, and Stahl (2016) strikingly found that institutional theory tenets—explaining either tendencies toward global isomorphism or the persistence of unique national institutional characteristics—could predict global or local corporate citizenship and social responsibility tendencies when taken together with acquisitions and global expansion from developing into developed markets. Specifically, Miska and colleagues determined that Chinese multinationals that had already expanded to the West through acquisitions were more likely to have locally responsive corporate citizenship and social responsibility patterns. They further found that the multicultural educational and work backgrounds of top management corresponded to corporate citizenship program development in both globally integrated and nationally responsive ways. Their research intriguingly suggests a transnational (global and local) direction for future theoretical and empirical research into the institutional theory-related interconnections between acquisitions and corporate citizenship, as global corporate citizenship and social responsibility programs reflect isomorphic tendencies as predicted by institutional theory. Locally responsive corporate citizenship and social responsibility programs reflect national institutional forces influencing corporate citizenship, sustainability and social responsibility at the local level.

Institutional theory can be approached from other vantage points as well—such as from an top leadership/individual actor-centric and community engagement (Selmier, Newenham-Kahindi, & Oh, 2015)



perspective, interlinking acquisitions and corporate citizenship, sustainability and social responsibility with additional enrichment to understanding. Responsiveness to multiple constituencies falls within the overall CEO leadership mandate in guiding a firm and directing expansionist maneuvers such as acquisitions (Park, 2016). Nevertheless, when corporate citizenship principles conflict with CEO ambition and perceived opportunities for a dramatic enhancement of market power, the corporate citizenship mandate may succumb to the strategic imperative for expansion (Hubbard, Christensen, & Graffin, 2017; Maak, Pless, & Voegtlin, 2016). The broader interest for community involvement is then forgotten. Only later, in the aftermath of a crisis, can the failure of corporate citizenship and social responsibility juxtaposed against an overly forceful expansionist and acquisition-driven organizational agenda be lucidly analyzed. In the case of Belgian bank Fortis attempting to acquire Dutch giant ABN AMRO as part of an acquisition consortium involving the Royal Bank of Scotland and Santander (Hassan & Ghauri, 2014), an overly aggressive acquisition program felled two of the three acquiring companies and leaders (Fortis and RBS), and their corporate citizenship and social responsibility programs fell with them (Fassin & Gosselin, 2011). Stakeholders fell (in order of precedence) to strategy, ethics to opportunism, and corporate citizenship to acquisitions, with the financial services industry perhaps having a peculiar vulnerability to ethical breaches due to the compelling need for transparency to ensure integrity in monetary transactions (Park & Hollinshead, 2011). Institutional supports for corporate citizenship and social responsibility could not withstand the intensive preferences for expansion, even when it meant overriding ethical dilemmas and contravening the organization's own corporate citizenship, sustainability and social responsibility guidelines (Fassin & Gosselin, 2011). The research has not indicated instances of corporate citizenship and social responsibility failure per se but has pointed to leadership failures that have harmed corporate citizenship and social responsibility initiatives as a consequence, again emphasizing the importance of individual actor-centric perspectives.

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# EFFECTS OF TEAM PERFORMANCE ON THE PERCEPTION AND THE ATTITUDE OF MEMBERS OF A SOCCER CLUB'S LOYALTY PROGRAM

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## ABSTRACT

*This study investigated how a soccer club's performance affects members of the club's loyalty program, regarding perception of offered benefits, attitude towards the program and intention to maintain affiliation. A panel of 371 program members of a club in Brazil revealed that team performance affects even those who show high identification with the club, changing their attitude towards the program and the intention to remain affiliated. There were no changes in self-esteem, in sense of belonging and in status perception of affiliation. Other factors may have changed the perception of social benefits, thus reducing the impact of team performance.*

**Keywords:** Loyalty; Social Identity; Loyalty program; Intention, Benefits.

## INTRODUCTION

The purpose of loyalty programs is to establish a high level of consumer retention, especially in more profitable client segments, promoting satisfaction and generating value for the participants (Bolton, Kannan & Bramlett, 2000). They are widely adopted by companies of different industries, ranging from airlines and hotels to banks and retail (Dowling & Uncles, 1997; Bolton, Kannan & Bramlett, 2000; Kang, Alejandro & Groza, 2015;). Customer maintenance allows for a larger share of wallet and revenue increase (Meyer-Waarden, 2007), provides greater sales predictability (Evanschitzky et al., 2012), raises positive "word of mouth" and reduces churn (Zeithaml, Berry & Parasuraman, 1996). Such dynamics can also be seen in sports, with a growing focus on generating long-term relationships with supporters (Fleury et al., 2013).

In Brazilian soccer, such initiatives started in the turn of the XXI century, aiming at new sources of revenue and at relationship growth (Cardoso & Silveira, 2014). Loyalty program charges a monthly fee and the main benefits are financial, including discounts on products, services and tickets; and social, offering experiences, status and recognition to fans who join the program. Rewards may vary according to the plans offered by each soccer club (Fleury et al., 2016; Pereira et al., 2014). There are more than 1.3 million active members of loyalty programs in Brazil, from more than 70 different soccer clubs (Best Soccer, 2017), which generate an yearly revenue of approximately USD100 MI, already more than the revenues generated by the clubs' ticket box offices.

Even with the growth observed in recent years, the number of fan members of the vast majority of clubs fluctuates drastically, depending on the results obtained. For instance, the team Cruzeiro achieved the mark of 80.000 members after becoming Brazilian national champion for the second time in 2014; but the numbers were cut in half in 2016, after a year of failures and raised again to 64.000 after conquering the Brazilian Cup in 2017 (Capelo, 2017; Pereira et al., 2014). Therefore, understanding the reasons behind membership cancellations is an important issue to football club marketing managers, involving portfolio management and budget compliance.

Under the Social Identity Theory (TIS) lenses, during periods of success of the beloved team, both highly identified fans and those with low identification would seek to increase their association with the club, to strengthen their social identity and self-esteem, by wearing the team's shirt after a title conquest. However, in moments of defeat,

the strategy of disassociation, or cutting off the relationship with a club to preserve social identity, is an option that, according to this theory, would only occur with fans of low identification, since the highly identified members have their team affiliation central to their identity, hence cutting ties would not be an option for them (Russell, 1993).

The benefits offered by loyalty programs can be of two kinds: financial / economic (Mimouni-Chaabane & Volle, 2010) or social (Brashear-Alejandro, Kang & Groza, 2016). Social benefits have the ability to dialogue with the social identity theory, from dimensions such as belonging and status (Brashear-Alejandro, Kang & Groza, 2016; Kang, Alejandro & Groza, 2015; Tajfel & Turner, 1986). Some authors discuss the neglect of studies involving longitudinal data, especially identifying the impacts of the loyalty program on consumer attitudes and behavior (Dorotic & Verhoef, 2011), which is partially covered by the current research.

This study aims to identify how supporters, who are part of the loyalty program of their team, react to both victories and defeats, regarding the propensity to stay or exit the program, from Social Identity Theory's standpoint. Besides, the study seeks to demonstrate the magnitude of the impact that sports performance has on the evaluation of the social benefits of the loyalty programs by members with high identification levels, which, to the best of the authors' knowledge, has not been analyzed so far.

## **SOCIAL IDENTITY THEORY AND LOYALTY PROGRAMS IN**

The dualistic classification systems represent the first attempt to differentiate the sports consumers, being initially used in European soccer between 1970 and 1980 (Stewart, Smith & Nicholson, 2003). However, categorizing the fans showed to be much more complex than what was proposed by dualistic taxonomies, making the results simplistic and limited and hence leading to the development of multifaceted taxonomies. Thus, in the 1990s, levels of intensity in the links between the individual and the club began to be measured from the ordering of their beliefs and behaviors (Stewart, Smith & Nicholson, 2003). The work of Wann and Branscombe (1993) stands out with a great number of citations, and continues being one of the main scales used in the area. The use of identification with the team as a dimension of analysis for categorization allows its connection with theories, such as Social Identity (Giacomini, 2011; Pereira et al., 2014).

The Social Identity Theory (TIS) was developed by Tajfel and Turner in the late 1970s and is one of the main theories used in the field of Sports Marketing, for articulating important constructs such as identification, self-concept, status, belonging, self-esteem and influence in individuals' behaviors (Giacomini, 2011). According to TIS, the self-concept of the individual is derived from the personal identity, composed of idiosyncratic characteristics of each person (skills, interests and personalities) and of the social identity, knowledge that the individual has of belonging to a social group, and that value and significant emotions are provided by being a member of this group (Ashforth & Mael, 1989; Tajfel et al., 1979). Adherence to groups and strong identification with them helps to reduce the uncertainty of the social self, while promoting social rewards (prestige) or benefits (self-esteem) based on the interaction with the group. Therefore, the social identification is a reflection of an individual psychological relationship with groups of relevance and with their own identity (Tajfel & Turner, 1979).

The Social Identity Theory and other studies that correlate the level of brand identification and brand association with the fans' behavior (Fisher & Wakefield, 1998) demonstrate that fans with high identification with the team will remain faithful, in attitudinal and behavioral terms, even when the team faces successive defeats. Fleury et al. (2016) state that higher levels of fans identification not necessarily will produce a better perception of the social benefits of relationship programs. It is proposed that even member with high identification levels will evaluate social benefits in a less favorable way after failures, since such benefits are anchored in dimensions such as belonging, status and recognition, and the supporter will seek to preserve, even partially, their social identity. Therefore, even members with high identification will be inclined to step out of programs as a way to protect their social identity.

Wann and Branscombe (1992) showed that, considering the levels of identification of fans towards a club, emotions and the social identity theory can be related. The authors pointed out that the level of identification of the supporter in relation to their club acts as a moderator in affective reactions (positive and negative), in victories or defeats. Therefore, the first hypothesis can be proposed:

H1: The self-esteem of the fan-supporter will be significantly greater in positive times of the club than in negative ones.

Although there are studies examining the relationship between the motivation to engage in a group and their attitude towards the group (Crocker & Luhtanen, 1990), no study was found linking an individual's self-esteem with their attitude toward being a member of a subgroup in sports. However, since attitude is an affective reaction to an object (Ajzen & Fishbein, 2000; Fishbein & Ajzen, 1975), and the reactions exhibited by fans are highly emotional and passionate (Sloan, 1979), it can be assumed that:

H2: The attitude towards participating in the loyalty program will be significantly greater at positive times of the team than at negative ones.

However, since members of the loyalty program represent a subgroup relative to the soccer fans, it may be considered that even highly supportive members may leave the program, hence the hypothesis can be considered:

H3: In negative moments, the members will significantly increase their intention to leave the program when compared to positive moments.

The concept of loyalty program involves a wide variety of initiatives integrated into the marketing system, ranging from product discounts to exclusive events and special privileges (Henderson, Beck & Palmatier, 2011;). Consistent with this line of thought, and based on the extensive literature review by Henderson, Beck and Palmatier (2011), loyalty program is defined as "any institutionalized incentive system that attempts to increase customers' consumption behavior over time" (p.258).

Despite some variation among authors, the success of a loyalty program tends to converge around the efficiency in which a company creates or enhances a relationship that encourages the repurchase of products or services (Dowling & Uncles, 1997; Sharp & Sharp, 1997), increases the average value spent by customers (Bolton, Kannan & Bramlett, 2000), and produces value to consumers with rewards aligned with their profile, thus promoting satisfaction and loyalty (Dorotic & Verhoef, 2011; Kang, Alejandro & Groza, 2015; Suh & Yi, 2012).

The soccer loyalty programs seek to offer a bundle of benefits, such as discounts (on products, services and tickets), and intangible rewards, such as purchase priorities, exclusive experiences and unique content. The purpose is to increase the club's revenue, directly and indirectly, by increasing the frequency of purchases of official products (shirts, for example) and increasing the attendance to stadiums (Pereira et al., 2014). The benefits and rewards of loyalty programs can be categorized into two dimensions: economic (or financial) and social (or non-financial) (Brashear-Alejandro, Kang and Groza, 2015). The economic benefits are essentially instrumental, cognitive, functional and tangible, promoting value to consumers by providing means to achieve an end (Mimouni-Chaabane & Volle, 2010). It is possible to suppose that:

H4: The perception of the financial benefit will not vary significantly according to the team's performance.

There is a fundamental difference between being loyal to a company and being loyal to the loyalty program. Unlike loyalty to a brand, which has a more emotional nature, loyalty to a program tends to be strongly driven by its financial nature. Thus, consumers may not necessarily develop a favorable attitude to the company's loyalty program and still continue shopping from the company (Evanschitzky *et al.*, 2012; Meyer-Waarden, 2007). Many loyalty programs seek to move consumers from a relationship based on economic dimensions to a social dimension, centered on strong relationships built over time and based on trust. It is assumed that the results will be better if the focus is shifted from the economic transaction program to an intensive consumer relationship (Henderson, Beck & Palmatier, 2011; Palmatier et al., 2006), through social benefits.

Social benefits can be personal recognition (when consumers know new people and are recognized by others through the loyalty program (Gwinner, Gremler & Bitner, 1998); benefits related to unique and exclusive, hedonic and emotional experiences, especially attracting consumers who value socialization opportunities (Arnold & Reynolds, 2003); the consumer's sense of belonging, which is a benefit stemming from the belief and expectation that the consumer has a position recognized by others within the group itself, using organizations to satisfy self-defining needs (Brashear-Alejandro, Kang & Groza, 2016; Fleury et al., 2016; Mcmillan & Chavis, 1986); the attribution of status, which can generate favorable comparisons with other consumers and raise the individual's self-esteem. This is a process fundamentally generated by social comparisons and classifications (Henderson, Beck & Palmatier, 2011).

Loyalty programs can be a way of approaching consumers and organizations, promoting the formation and development of identification, especially in terms of the social benefits offered (Brashear-Alejandro, Kang & Groza, 2016). Providing the consumer with opportunities to be called on to try out new products, or, when it comes to sports,

have access to important matches through the loyalty program, are examples of social benefits to increase engagement with the organization (Arnold & Reynolds, 2003; Fleury et al., 2016; Mimouni-Chaabane & Volle, 2010). The TIS explains how the individual involuntarily compares herself with other individuals and groups, and wishes to perceive herself as superior or differentiated (distinctive) (Turner, 1975). People seek to belong to groups associated with high status to reinforce their self-image and self-esteem (Tajfel & Turner, 1979). Therefore, the attainment of status depends on the combination of both internal and external perceptions of individuals. It is proposed that:

H5: The feeling of status for being part of the program will be significantly greater at positive club times than at negative ones.

It is also important to emphasize that identification is the perception of belonging to a group, involving direct or observable experiences of its successes or failures. Identification is associated, by other social groups, with groups that are "distinctive" and prestigious (Ashforth & Mael, 1989), which allows one to consider that:

H6: The feeling of belonging to the loyalty program will be significantly greater in positive moments of the club, than in negative ones.

Adopters of loyalty programs, when compared to non-program members, tend to display strong loyalty to the brand sponsor of the program, to exhibit very positive attitudes toward it, and to be heavy users. These characteristics tend to be even more noticeable in early adopters of loyalty programs (Meyer-Waarden, 2008). Considering that loyalty programs are relatively new, still far from the maturation stage, it is expected that their members have a high degree of identification with the club. Thus, it is proposed that:

H7: Members of the loyalty program will have a high degree of identification with the club.

## METHOD

A longitudinal design (panel) was conducted to allow the study of changes over time and visualization of patterns in relation to the loyalty program. Eight variables (intention, identification, status, belonging, attitude, financial benefits, team success and self-esteem) were measured. Two deserve greater emphasis on the choice of scales: identification and self-esteem. Likert five-point scales were used to measure attitude, intention, social benefits, and financial benefits. Identification was used as variable of classification for the members. One of the most used scales in studies related to Sports Marketing was adopted, the Sport Spectator Identification Scale (SSIS), proposed by Wann and Branscombe (1993), SSIS has been extensively tested in different contexts and is considered a reliable way to access a fan's identification with his club (Wann et al., 2001), being translated into several languages, including Portuguese (Theodorakis et al., 2010; Wann & Weaver, 2015).

Several scales are available to measure self-esteem, the majority based on the personal identity evaluation and just a few on the social identity (Tomas & Oliver, 1999). The Wann scale (1995), widely tested and validated, was adopted, allowing to access the self-esteem of sports fans through three items. Table 1 summarizes the scales.

**Table 1: Scales.**

Construct	Items	Authors	Scale
Identification	7	Tajfel & Turner, 1979; Ashforth & Mael, 1989; Sutton et al, 1997; Wakfield & Wann, 2006	Wann & Branscombe, 1993
Belonging	3	Brashear-Alejandro, Kang & Groza, 2015; Mimouni-Chaabane & Volle, 2010; Fleury et al, 2016.	Brashear-Alejandro, Kang & Groza, 2015
Status	3	Brashear-Alejandro, Kang & Groza, 2015; Henderson, Beck & Palmatier, 2011; Dréze & Nunes, 2009; Fleury et al, 2016.	Brashear-Alejandro, Kang & Groza, 2015
Team's success	3	Cialdini et al, 1976; Fisher & Walkefield, 1998; Wann, 1993.	Biscaia et al, 2015
Self esteem	3	Crocker & Luhtanen, 1990, 1992; Rosembert, 1985; Hogg, 1998.	Wann, 1995
Attitude	3	Henderson, Beck & Palmatier, 2011; Pereira et al, 2014.	Pereira et al, 2014

Financial benefits	4	Kang, Brashear-Alejandro & Groza, 2014; Suh & Yi, 2012.	Kang, Brashear-Alejandro & Groza, 2014
Intention	3	Sharp & Sharp, 1997; Henderson, Beck & Palmatier, 2011; Evanschitzky et al, 2012.	Hhalifa, Kathy Ning, 2009; Lin, Lu & Ph, 2011; Pereira et al, 2014

The access to a database of members of the loyalty program of the most popular soccer club in Rio de Janeiro (Brazil), with about 100 thousand members, was allowed by the club's directors. Sample selection was random, with a single restriction - the participants should be residents in the state of Rio de Janeiro. To increase response rate, images of club idol players were used in the invitation e-mail arts, as well as callout phrases to participation in the study. A symbolic prize (have the name posted on the club website) was also offered to members that participated in all rounds. The national ID number was used for control. Each round included only members who participated in all previous rounds. Data was collected during the final rounds of Brazilian and South American Cups (total of 11 matches), in November and December, 2017. Questionnaires were sent by e-mail. Four questionnaire rounds were conducted, allowing to capture data from a moment when there were but expectations in relation to the two championships (the first round) until the last game of the year, when expectations had already turned into facts. The first round was discarded due to the low number of respondents.

## DATA ANALYSIS

Table 2 shows the results of the team during the period of data collection. The final round had 371 respondents. No relevant outliers were found. In almost all cases, the variables had asymmetric distribution, with skewness to the right. This was expected, considering that the sample was composed by fans with a high degree of identification with the club, with a very positive perception of the attributes of the loyalty programs, including social benefits (Fleury et al., 2016).

Reliability was improved by removing one item in the identification scale. Alpha was  $> 0.7$  for all constructs except of self-esteem in rounds 3 and 4, and sports performance in round 3. This was considered acceptable for this study. Identification was collected only in the first round, since Lock et al (2014) showed that it is invariable in short- and medium- terms.

The most extreme evaluations of the sports performance (DESE) ( $t = 20.5$ ,  $p = 0.000$ ) were on rounds three and four, due to negative results of the club, immediately before the 3rd round ( $M = 2.48$ ), and positive, before the 4th round ( $M = 3.28$ ). Considering this, the two moments, 3rd and 4th rounds, were selected for hypothesis testing, once they represent the most significant differences in club performance. Paired t-test, between the negative (round 3) and positive (round 4) moments, was used to test the hypotheses.

**Table 2: Team results during the period of data collection.**

Date	Championship	Opponent	Results	Round
28/Oct	Brazilian Cup	Vasco	Tie 0 x 0	1st
02/Nov	S. American Cup	Fluminense	Tie 0 x 0	
05/Nov	Brazilian Cup	Grêmio	Defeat 3 x 1	
08/Nov	Brazilian Cup	Cruzeiro	Victory 2 x 0	2nd
12/Nov	Brazilian Cup	Palmeiras	Defeat 2 x 0	
16/Nov	Brazilian Cup	Coritiba	Defeat 1 x 0	3rd
19/Nov	Brazilian Cup	Corinthians	Victory 3 x 0	
22/Nov	S. American Cup	Jun. Barranquilla	Victory 2 x 1	
26/Nov	Brazilian Cup	Santos	Defeat 2 x 1	
29/Nov	S. American Cup	Jun. Barranquilla	Victory 2 x 0	
03/Dec	Brazilian Cup	Vitória	Victory 2 x 1	4th
<b>Performance:</b>	<b>2 cups</b>	<b>11 games</b>	<b>5 victories, 4 defeats, 2 ties</b>	<b>4</b>



Two facts were responsible for the acceptance of H7: (1) When comparing the sample mean with partners with maximum evaluation ( $M = 5.0$ ), there was no significant difference in any of them, with the exception of self-esteem. (2) The mean value of the identification was high ( $M = 4.54$ ). It was expected that self-esteem and social benefits (belonging and status), at moments of bad results, presented means significantly lower than those obtained at positive moments. However, H1, H5 and H6 were not accepted: H1 (self-esteem),  $t = 0.09$  ( $p = 0.93$ ); for H5 (belonging),  $t = -0.21$  ( $p = 0.83$ ) and H6 (status),  $t = 0.86$  ( $p = 0.39$ ).

Soccer loyalty programs in Brazil often do not provide observable external recognition of partners, either through social interaction or through the exploration of experiences. This directly impacts the feelings of belonging and status, since the programs do not arouse a sense of affiliation, involvement with the organization or acceptance by others, making it difficult to develop social identity (Arnold & Reynolds, 2003; Drèze & Nunes, 2009; Fleury et al., 2016). Besides, it was found that the members have a high level of identification with the club. As Fisher and Wakefield (1998) show, this profile is more loyal to the club, even in periods of bad results, which could explain why self-esteem, belonging and status do not depend much of results.

The financial benefits (H4) are also the main return offered and communicated by the clubs (Fleury et al., 2016; Pereira et al., 2014). As such benefits have a more rational, rather than an affective, nature, it was envisaged that moments of club victories and defeats would not significantly influence the assessment of the financial benefits (H4). The hypothesis was accepted ( $t = 0.35$ ,  $p = 0.73$ ). There was a significant difference of the attitude in relation to the loyalty program between negative (round 3) and positive (round 4) moments (H2) ( $t = 7.86$ ,  $p = 0.001$ ). As an affective variable, it was expected to be affected by the results. The intention to continue in the member program followed a similar behavior, showing significance ( $t = 2.56$ ,  $p = 0.010$ ) when comparing the positive and negative moments. This suggests that the match outcomes significantly influence the propensity to continue in the program. It is worth mentioning that the loyalty programs currently revolve, essentially, around the stadium (ticket discounts, ticket purchase priority and stadium experience). By linking the program and its major benefits to the stadium, clubs ultimately link the program to club sports results, which favors such a swing of the attitude variable.

## FINDINGS AND DISCUSSION

The results suggest that members have increased their propensity to leave the program after negative moments, but this would not be due to social benefits or self-esteem, as initially hypothesized. Belonging, status and self-esteem remained unchanged between positive and negative moments of the team. Social benefits (status and belonging) and self-esteem are directly related to the social identity theory (Brashear-Alejandro, Kang & Groza, 2016; Kang, Alejandro & Groza, 2015; Tajfel & Turner, 1986), which proposes that, for the construction of social identity, it is necessary that individuals be classified and defined from the social groups to which they belong. However, in the loyalty program, other people do not know who is or is not a member, since there are no visible and observable mechanisms of membership, fundamental factors for the development of belonging and status (Brashear-Alejandro, Kang & Groza, 2016; Tajfel & Turner, 1979; Turner, 1975). Thus, a process of personal recognition is not generated (McMillan & Chavis, 1986). This creates an obstacle in the development of the feeling of affiliation, involvement with the organization and acceptance, making it difficult to develop a social identity from the subgroup (Arnold & Reynolds, 2003; Drèze & Nunes, 2009; Fleury et al., 2016).

On the other hand, attitude is an affective response, intrinsic to the individuals (Ajzen & Fishbein, 2000; Fishbein & Ajzen, 1975). Even if they are not associated with the loyalty program, which, therefore, does not interfere with their social identity, they may still have positive or negative attitudes towards the program. Team performance had a smaller than expected influence. Its role as a moderating factor was confirmed only in relation to attitude and intention to stay in the loyalty program. In unsuccessful times, even individuals with a high degree of identification with the club have a less positive attitude towards the program and their intention to stay on the program significantly diminishes. Since membership is still tightly tied to ticket discounts, a financial benefit, it seems comprehensible that the numbers float according to the results. When the team is playing well, fans are eager to attend the matches, but the other way around is also true. Therefore, offering benefits that go beyond the matches seems to be a plausible way to achieve stability in the program numbers.

Clubs should take advantage of moments of victories and sports successes to encourage early renewals of memberships. It is also suggested to develop other ways of creating visibility, so that members, and their status level, can be recognized by others, members or not (Heffetz & Frank, 2008). So far, the only tangible visible aspect that identifies the participant and their level in the program is a membership card that is provided at the time of joining the program. Several studies suggest that loyalty programs focused exclusively on financial rewards tend to fail on sustaining consumers in the long run (Henderson, Beck & Palmatier, 2011). There is no clear evidence that such benefits result in successful loyalty programs (Dowling & Uncles, 1997; Fleury et al., 2016). The development of non-financial benefits, such as social benefits, are important for the development of consumer loyalty (Henderson, Beck & Palmatier, 2011). Through social benefits, loyalty programs will have the ability to develop and elevate loyalty and consumer identification with the club (Kang, Alejandro & Groza, 2015).

This study focused only on members of one club, due to the easiness of access to their database. Results and conclusions cannot be generalized. Future research can extend the scope of the longitudinal study, starting from the beginning of the championship and lasting until its end, perhaps considering more clubs. The results suggest that the team performance affects the attitude towards the program and the member's intention to remain affiliated. However, differently from what literature points out, such changes were not accompanied by changes in self-esteem, in the sense of belonging and in the status perception. As feelings are an important path to the customer's heart, increasing the affiliation feeling by social distinction can come in handy in reducing the impact of the team performance on the program. Emotions, so dear to sports, can be useful to its management.

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# HIGH-SCHOOL LEARNER TEENAGE PREGNANCY: CONTEXT-SPECIFIC ISSUES IN MPUMALANGA AND LIMPOPO PROVINCES, SOUTH AFRICA

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## ABSTRACT

*This presentation investigates teenage pregnancy in Mpumalanga and Limpopo provinces of South Africa from pregnant high-school learners' perspective. The research question was 'How do learners in Mpumalanga and Limpopo provinces perceive teenage pregnancy'? The study found (1) statutory rape accounts for 25% of the respondents' pregnancies and (2) suicide ideation was common among respondents. Researchers argue that when a social problem like high school learner pregnancy is depoliticized and converted into personal failure, what is a social problem appears to be of individual origin. Emphasis is placed on individual responsibility regarding success or failure. Since the intersection of statutory rape and suicide can shape minor children's life course adversely it needs to be more clearly attended to in policy formation with a view to realize the United Nations Convention on Rights of Children "Best interest of the child" which has been ratified by South Africa.*

**Keywords:** High-school learner teenage pregnancy, statutory rape, suicide ideation, best interest of the child, South Africa.

## INTRODUCTION

In 2010 various local media houses reported alarming 60 000 high-school learner pregnancies in South Africa. The purpose of this presentation is to discuss context-sensitive issues surrounding high school learner pregnancy in the Mpumalanga and Limpopo provinces of South Africa. The research question was 'How do school-going learners in Mpumalanga and Limpopo provinces perceive teenage pregnancy? Firstly, the presentation will focus on introductory literature on suicide, selected elements of rape as a form of domestic violence and highlight the relevant legislation. Secondly, findings of the study will be critically discussed. Lastly, implications for social service professions will be considered, particularly School Social Work as a Specialized field of Practice since our research site was the school context. This discussion forms part of an inquiry on the impact of high school learner pregnancy on various aspects of the learner's life course, including health and education.

## THEORETICAL FRAMEWORK

### Context-specific elements of rape

The following selected statistics show that the prevalence of rape in South Africa is very high. According to The Witness newspaper, crime statistics released by South African Police (SAPS) on 14 September 2018 show that from April 1, 2017 to March 21, 2018 reported rapes in South Africa increased to 40,035 cases. Reported sexual assault

increased by 8% to 6, 786 cases. Sexual offenses against women were reported to have dropped by 1,7 % to 36,731 cases during the same period. As researchers we maintain that these 36,731 drops are still alarmingly high. Moreover, these statistics provoke the question what about rape cases and sexual offenses that remain unreported for various reasons, including fear of intimidation and/or further victimization by the same perpetrator (s)? The South African Constitution Act 106 of 1996 states in section 29 (1) (a) that everyone has the right to basic education. Section 29 (1) (b) provides for the right to further education. This right must be provided for by the South African government on a progressive basis through reasonable measures. The intents of the Constitution as the supreme law of the country are to improve the quality of life and health for all citizens. In keeping with this, all other legislation, policies and programs must follow the provisions of the Constitution. To realize this, The Schools Act 84 of 1996 was promulgated as a constitutional imperative. Section 3 of the Schools Act states that school attendance is compulsory for children between the ages of seven and fifteen (or Grade 9, whichever comes first). Any person, including a parent, guardian, school official or a member of the community that interferes with a child's compulsory school attendance without justifiable reason, commits a criminal offence punishable by law. Furthermore, through Section 5 (1) the Schools Act protects learners against unfair discrimination of all forms.

## Suicide ideation

To situate the scourge of suicide within the South African context, Schlebusch, Vawda and Bosch (2003) study observed the following suicidal patterns: 1) Up to 8 000 South Africans commit suicide annually; 2) Nearly five times more males than females commit suicide; 3) Suicide occurs in the younger age group (15-34 year old's); 4) The youngest suicide fatality in 2001 was 10 years old, but more often suicides which are fatal occur in the age group of between 15 and 19 years; and 5) Firearms, hanging and poison ingestion were found to be the most common methods in South Africa. Madu & Matla study (2003) found that the most frequent methods used for attempted suicide was self-poisoning (44%), followed by drug overdose (25.3%) and hanging (22%). These findings were based on school adolescents in Limpopo province of South Africa, where part of this study was conducted (p. 126-132). Marincowits, Ragavan & Malete (2004) study concluded that suicidal behavior is associated with unbearable internal state of pain and reasons behind a teen's suicide attempt are complex. While researchers who conducted studies in South Africa with a view to unravel complexities of the scourge of suicide converge and diverge in their analysis, they seem to converge at an understanding that suicide is on the increase (Madu & Matla, 2003; Schlebusch, 2004; Meehan, Peirson & Fridjhon, 2007). Also, Bridge, Goldenstein & Brent (2006) study found some gender difference in suicide patterns. "Female youth have high rates of suicide attempts while males have a higher rate of completed suicide". A study by Burrows & Laflame (2006) found that while suicide is not a leading cause of death in South Africa, it is a serious public health concern with the incidents of suicide varying across different ethnic and socio-economic groups and geographic regions. Another study by Clark (2004) stated that "At least two fatal suicides occur in South Africa every hour and 20 attempted suicides every 60 minutes". What is instructional about Schlebusch et al. study (Ibid.) is their revelation that between 6 893 and 8 000 South Africans commit suicide every year, which translate into 667 deaths a month, 154 every week, and 22 every day.

## METHODOLOGY

The study was conducted in Limpopo province (Makhado Region) in 10 Schools and in Mpumalanga (Nkomazi Region) nine Schools were involved. Data were collected through a semi-structured questionnaire which included different elements of learner pregnancy. The design was explorative and contextual. Purposive sampling was used to select 400 participants and only 387 responses were usable as indicated in Table 1. Ethical integrity was ensured. Narrative Analysis was used to make sense of the respondents' narrative accounts. According to Riessman (1993) "Locating narratives of personal experience for analysis is not difficult. They are ubiquitous in everyday life. /.../ Respondents narrativize particular experiences in their lives, often where there has been a breach between ideal and real, self and society" (p. 2-3). The themes that emerged inform the ensuing discussion constitute the bases from which this presentation draws its conclusion, namely, (1) statutory rape and abortion incidents; (2) suicide ideation and drug abuse.

**Table 1: Population and sampling**

<b>Limpopo province</b>	<b>Mpumalanga province</b>
Grades: * 10= 32 (16.3%) * 11= 39 (19.9%) * 12= 125 (63.8%) Total: 196	Grades: * 10 = 111 (58.1%) * 11 = 27 (14.1%) * 12 = 53 (27.7%) Total: 191

## **FINDINGS AND DISCUSSION**

### **Statutory rape and abortion incidents**

In South Africa the Criminal Law (Sexual Offences and related Matters) Amendment Act 32 of 2007 defines statutory rape and sexual assault in Section 15. Statutory rape occurs when a person has sexual intercourse with a child between the ages of 12 and 16, even if the sexual intercourse happens with the “consent” of the child. Respondents accounts of their lived experiences centered mainly on themes reviewed in this section. They narrated that they have had to contend with being raped by their biological fathers, and that the practice had become a norm in their respective family environments. These allegations translate to statutory rape, and the same pattern of incidents account for 25 percent of the 387 respondents’ pregnancies. Statutory rape incidents were also mentioned by those who were involved in intimate relationships “of their choice” during a relationship arrangement they referred to as “my sugar daddy”. To this end some of them reported poverty as one reason that kept them in abusive intimate relationships that they individually acknowledged as being abusive. Whenever statutory rape and/or domestic violence incidents were narrated respondents reported that they did not know any better about what they described as a “vicious cycle”. Moreover, they mentioned that pregnant high-school learners perceive suicide as an easy alternative to escape pregnancy-related uncertainties, particularly those whose pregnancy had a statutory rape and/or incest history.

Furthermore, respondents reported that abortion is common place among their fellow high-school going learners who seem not to be in favour of the option of keeping the baby. They estimated that the numbers of those who commit abortions are by far more that those who chose to endure the uncertainties and difficulties associated with the lived experiences of their respective pregnancies. In fact, statutory rape and abortion incidents were often mentioned together in the same interview excerpt almost all the time these issues were narrated. Our respective research experiences transcending different disciplines show that more often than not the pregnant high school teenager is stigmatized and marginalized because of the pregnancy, whilst the unborn baby’s father seems to somehow “escape” the same experiences aided by, among others, apparent patriarchal social stereotypes persisting in South Africa. Given that Sections 9 (3) and 9 (4) of the Constitution prohibit any kind of unfair discrimination on the grounds of gender or sex, the latter stereotypical practices amounts to unfair discrimination for the girl-child.

### **Suicide ideation and drug abuse**

Suicide ideation was common among respondents with 55% indicating that they have entertained it at one point or another during their pregnancy. 27% of respondents reported having lost their friends to suicide because of what they perceived and described as “desperation” since they had concluded that help was not forthcoming at the time. On the other hand 32% of them reported that if they did not get help from their abusive environments they would have considered suicide as a viable option. Furthermore, drug abuse was commonly reported to take place within their

respective school premises. Drug abuse was reported as short-term survival strategy for the much-needed psycho-social intervention which they claimed was the responsibility of social workers in particular.

## **IMPLICATIONS FOR MANAGEMENT**

For management of social service and organized professional organizations, the results of this study make a case for, among others, School Social Work as a Specialized Field of Practice. Taken together, analysis of the themes that emerged from this study have far reaching implications for the social service helping professions, particularly the social work fraternity, if what the respondents claim in the previous section to be the responsibility of social workers is anything to go by. In essence, the purpose of School Social Work is to enhance interaction between children and their environment. For example, organizing parent-children meetings to address children's problematic encounters with their respective environments. School Social Work helps to enhance teaching and learning in schools by providing children with necessary social skills for decision-making and problem solving. It improves the school's quality of life by making sure that, as a community of learners, teachers, parents and auxiliary workers the school is a conducive environment (has relevant resources) to promote appropriate competency in children. This presentation suggests that school-based programs should be context-specific and amplify intentional bias towards redressing the rural-urban socio-spatial injustices manufactured by colonial-project and apartheid era whose manifestations seem apparent from the analysis of the participants accounts. School Social Work as a specialized field of practice should be rendered along the continuum of Prevention-Development-Care-Support, particularly for high-school teenage pregnant learners.

Ubuntu Constructs like relationship, sharing, interdependency, cultural sensitivity, to name but a few, (Lebese & Phiri, 2012, p. 62) might be engaged as analytical tools for promoting United Nations Convention on Rights of the Child "Best interest of the child" which was ratified by South Africa. to promote notions of the school environment as a community in its own right. The authors suggest that there is need for collaborative and nationally coordinated interdisciplinary intervention initiatives that engage intersectional perspectives aimed at navigating the intersection of statutory rape and the suicidal ideation alluded to in respondents' accounts. This research seeks to contribute towards our understandings and debates of context-specific high-school learner teenage pregnancy phenomenon in Limpopo and Mpumalanga provinces, while advancing the constitutional imperative to improve the quality of reproductive health and life for, in this case, all school-going learners, particularly those in rural-based environments like Limpopo and Mpumalanga provinces given the urban-rural divide that characterise South Africa's colonial-apartheid past.

## **CONCLUDING REMARKS**

Altogether, the findings of this research tell us that when a social problem like high-school learner teenage pregnancy is depoliticized and converted into personal failure, what is a social problem and phenomenon appears to be of individual origin. Emphasis is placed on individual responsibility on the part of the high-school learner, particularly regarding success or failure. The study notes that the intersection of statutory rape and suicide ideation hold great danger for minor children. It can shape their life course experiences adversely and thus need to be more clearly attended to in service user participatory programs, including when arranging and outlining policy formations advocating Restorative Justice Approach (RJA) as constitutional imperative. It is envisaged that this notion will go a long way in terms of promoting and realizing the United Nations Convention on Rights of Children "Best interest of the child" which has been ratified by South Africa.



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# CONTEXT SENSITIVE VIOLENT CRIMES SURVIVOR-CAREGIVER-STAKEHOLDER EMPOWERMENT: MEMORIALIZING THOL'ULWAZI PROJECT STORY

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## ABSTRACT

*Ethnographic empirical data generated by Thol'ulwazi (obtain knowledge) Project enabled Lungelo Women's Organization, its administrator, to establish that most children who are abused sexually and physically find it hard to share their lived experiences with their parents because they fear rejection or being blamed for what happened. If not addressed timeously and decisively a possibility exists for this social ill to be normalized, thereby adding a new level of perplexity to this already complex international violent crime phenomenon. The authors suggest that by paying attention to local context there is recognition of the more intricate picture of violent crimes that acknowledges 'universality and particularism'- which might inform and direct a more nuanced service user participatory approach to policy formation.*

**Keywords:** Thol'ulwazi Project Story; Violent-crimes; Survivor-Caregiver-Stakeholder Empowerment; Lungelo Women's Organization; South Africa.

## INTRODUCTION

The presentation highlights the milestones of the Thol'ulwazi Project (hereafter referred to as Thol'ulwazi) and its purpose is three-fold. Firstly, it focuses on the genesis and developments of Thol'ulwazi spanning 2009-2019 amplifying a minimum of 14 first-hand narratives of people whose lives were touched and transformed in meaningful ways by Thol'ulwazi. Secondly, the context-sensitive nuances of violent crime phenomenon are discussed citing relevant empirical studies. Thereafter, implications for Non-Profit Sector Management Practices are suggested. The following section sketches out a brief overview of Lungelo Women's Organization (hereafter referred to as Lungelo) where Thol'ulwazi was conceived of and administered.

### Lungelo Women's Organization

Lungelo is a Community Based Organization (CBO) located in Southern Metropolitan Council Region D of Soweto which comprises an ever-growing number of 31 townships. It is registered under section 21 of Non-Governmental Organization Companies Act: 98/4303/08 and the NPO Act: 008 - 630. Lungelo was started in 1998 by a group of professional nurses who were troubled by alarming numbers of women who were visiting local clinics where they were employed following battering incidents by their partners. After attending a workshop on domestic violence they collectively decided to establish a responsive survivor empowerment non-government organization which is the subject of the present discussion. Lungelo renders direct services to violent crimes survivors, caregivers and

stakeholder engaging, among others, the United Nations Convention on Rights of Children (UNCRC) “Best interest of the child” principle which has been ratified by South Africa. Moreover, their programs promote the adapted UNCRC “Best interest of service user” principle while advocating context-specific responsive interventions that are culturally sensitive and locally credible. Lungelo is a Family-Centered transformation agent whose mission is redressing various forms of gender related social ills. Of the 57 million South African population ([www.statssa.org](http://www.statssa.org)) it focuses on the creation of an enabling environment aimed at improving the quality of health and life for the ever-growing number of five million Soweto inhabitants. This is achieved through context-specific and responsive violent crimes Survivor-Caregiver-Stakeholder Empowerment programs focusing on: a) Counselling and psycho-social support, b) Service user education, empowerment and advocacy. Lungelo’s vision and mission is premised on notions of a survivor-centered Restorative Justice Approach (RJA) such as: a) the right to be treated with respect and dignity; b) the right to receive information and c) the right to social protection.

## **Perspectives on violent crimes: Universality and particularism**

Domestic violence and emotional abuse are closely linked and are behaviors more often used by one person in a relationship to control the other. Domestic violence in itself has many forms including physical aggression, threats, sexual abuse, intimidation, passive or covert abuse. Physical abuse includes contact intended to cause feelings of intimidation, pain, injury, suffering or bodily harm. Today, in South Africa it is the leading cause of injury, particularly to, resulting in death to some (e.g. femicide). Given the rural-urban divide that persistently characterize the South African colonial-apartheid past, in some family environments women are conditioned through socialization processes to think that the meaning and purpose of their life course derives from ensuring, protecting and promoting the welfare of their families as their exclusive preserve. This is a social stereotype whose deviation might attract social stigma, perceived or real, including attendant feelings of insecurity - which partly explains why some women continue to stay in violent crimes environments even though receiving help is their human right guaranteed by the Constitution, Act 108 of 1996. Some women tend to think that if they leave their violent crime environments and/or partners there is a real threat to their lives and/or children. Our ethnographic observations tell us that many women are killed when trying to leave or free themselves; in fact it is common course in South Africa that when women try to leave, that is the time when it seems they are in greatest of danger. In as much as abusive men ought to take full responsibility and own up to their mistakes, treat their wives and/or partners right and set exemplary precedence for their children and/or younger generation – to the extent possible, women also owe it to themselves and their children to leave the abusive relationship as soon as they experience abuse or spot the signs of abuse in their relationship. In the final analysis, violent crimes survivors, who, more often than not are women, need to know that if they experience violent crimes in their intimate relationships for example, they can choose to seek help, take full responsibility for their welfare, stand up and claim their right to be treated with respect and dignity. Thus ensuring restoration of their self-worth.

United Nations Office of Drugs and Crime (UNODC) (2006) commissioned research on sampled countries with high incidents of violent crimes - aimed at establishing what the Criminal Justice System interventions were from respective nation states. That research report revealed that South Africa was not covered in glory as it ranked number one country with most rape incidents. Today, in South Africa statistics of violent-crimes continue to balloon. For example, STATS-SA show that the prevalence of rape in South Africa is very high. In 2009 it reported that every hour seven children are being raped in South Africa. In South Africa the Criminal Law (Sexual Offences and related Matters) Amendment Act 32 of 2007 defines rape and sexual assault. Section 15 of the same Act also prescribes that statutory rape occurs when a person has sexual intercourse with a child between the ages of 12 and 16, even if the sexual intercourse happens with the consent of the child.

On September 14, 2018 The Witness Newspaper reported on crime statistics from the South African Police (SAPS) showing that from April 1, 2017 to March 31, 2018 violent crimes against women and children increased. During this period, 291 more women were killed, 117 more boys killed, and 29 more girls were also killed. Moreover, reported rape incidents as forms of violent crime in South Africa increased to 40, 035 cases, while reported sexual offenses increased by 8,2% to 6, 786 cases. While the total number of sexual offenses against women was reported to have dropped by 1,7% to 36, 731 in the same report, we maintain that in a post-apartheid South Africa these statistics are still alarmingly high. Against this backdrop, by citing local and international studies, our aim is to show that violent crime is a complex international phenomenon, a responsibility for all and sundry, hence the Thol’ulwazi Intervention Approach (TIA). A study conducted by Juliet Watson (2011) in Melbourne, Australia focused on the intersection of

homelessness and intimate relationships for young women aged between 18-25 who had experienced homelessness. The latter was explored through in-depth semi-structured interview questions that asked about experiences and expectations of intimate relationships, the causes and impacts of homelessness, the utilization of survival sex and conceptualizations of identity. According to Watson (ibid.), “Survival sex, also referred to as transactional sex, sex for favors or opportunistic prostitution, is usually understood in the context of homelessness to be the exchange of sex for accommodation or other material support” (p. 644). The following excerpt from one of the respondents, Jessie, elucidates the point about how violent crime was a consistent facet of her life. It describes nuances of violent crime that underline how sexual violence might perpetuates the existence of a gendered hierarchy of marginalization.

Watson (2011) study revealed the following:

The first month of me living on the streets I was sexually abused, raped, oh, probably fifteen times by fifteen different males. And maybe I put myself in those situations cause I didn't know anybody. I didn't know anything about the streets. I didn't realize that if a guy offers you a lift or a place to sleep, they're not being nice. They're just doing it because they want to have sex with you and they can see that you're vulnerable. That's what happened to me a lot. People could see that I was vulnerable and they used that against me, to use it for their advantage, to get what they wanted out of me. And it was very hard for me (p. 646).

For policy formulation and practice, Watson (ibid.) correctly observed that each political, social, cultural and welfare landscape produces experiences that are also differentiated by gender, place, race and ethnicity, dis/ability and sexuality (p. 639). Riessman (1993) writes: “Despite the seemingly universality of the discourse form, some experiences are extremely difficult to speak about” (p. 3). A government commissioned study that sought to establish the profile of homeless people and the causes of homelessness in South Africa noted that violent crimes were overarching characteristics of the colonial apartheid rule.

Cross et al. (2010) study revealed that:

From the date when the Cape's Vagrancy and Squatting Act of 1878 legislation was passed, all the colonies tried to force the wondering homeless 'vagrant' into resident laborer status. By the early twentieth century, the problem of squatting and displacement was enormous. Thus, as numbers increased, the homeless rural population gravitated to the towns in search of work to substitute for the land-based livelihoods to which they no longer had access (p. 13-14).

What this revelation does not tell us is that displacements and land dispossessions were not accounted for, and that at the time, statistics were never kept on 'vagrants' or the 'floating population without shelter' (Cross et al., 2010; UN Centre for Human Settlements, 2001). The fact that “...all the colonies tried to 'force' the wondering homeless 'vagrant' into resident laborer status” seems adequate to show that violence was the *modus operandi* of the colonial project and apartheid regime, respectively. Therefore it is reasonable to suggest that this context specific violence ought to be termed *state-violence*, and not just violence. If we follow this developmental logic (Atkinson, 2015, p. 36) a possibility is created to conclusively argue that the colonial-project *per se* imposed a complex texture of violent crime in South Africa. We propose that the post-apartheid transformation agenda and the attendant public policy instruments would do well to factor in this nuanced understanding of violent crime into the analytical understandings of the genesis of violent crimes in South Africa. Given the notion that Restorative Justice is a constitutional imperative this decoloniality perspective broadens our horizons regarding geo-historical *particularities* of violent crimes in South Africa. To be sure, in 2019 Thol'ulwazi is privileged to celebrate a decade of service delivery to Soweto inhabitants and their neighboring communities. Engaging findings of the above-cited studies, in the next section we introduce you to a responsive context-specific violent crimes intervention, namely, Thol'ulwazi Intervention Approach (TIA).

## **THOL'ULWAZI INTERVENTION APPROACH (TIA)**

Thol'ulwazi Intervention Approach is informed by the notion that in South Africa, Community Empowerment, otherwise referred to as Community Development has been institutionalized in the Department of Social Development

(DSD) through the enactment of the 1997 White Paper for Social Welfare. TIA draws heavily on the following 1) National Policy Guidelines for Victim Empowerment; 2) Minimum Standards on Services for Victims of Crime; 3) The National Policy for Families. Through evolving collaborative ventures of both authors TIA aims to respond to the dual and overlapping roles of academia and practice in co-producing context-sensitive knowledge and programs that are responsive to the ever-changing needs of the service users as well as the communities within which they are embedded.

## The purpose and outcomes

The purpose of TIA is to educate and inform families and community members about sexual and physical violence and its impact with a view to ensuring that there is open communication that fosters an environment where there is trust, acceptance, and potential for maximized violent crimes survivor-caregiver-stakeholder empowerment. To advance the responsiveness of this training program the following elements were developed and realized: four outcomes, three obligatory outcomes and 24 measurable outputs.

**Table 1: Outcomes (foundational)**

<i>Outcome 1</i>	trained 60 parents residing in Soweto, Gauteng Province divided in three groups of 20 each in a three-day workshop on how to create an enabling environment for maximized communication with the children to realize “Best interest of the child” principle.
<i>Outcome 2</i>	960 counselling sessions conducted by qualified social workers for parents and children residing in Soweto guiding them on how to communicate effectively with children by the end of 30 August 2010.
<i>Outcome 3</i>	60 parents residing in Soweto, Gauteng Province met in groups of four in March, May, and July 2010 to assess progress in a 2-day coaching and support environment.
<i>Outcome 4</i>	ensured that 400 families in the Soweto community are informed about violent crimes such as rape directed at children and its impact through a 2-day outreach and awareness raising campaign during the May National Child Protection Week and the August National Women’s month.

**Table 2: Obligatory outcomes**

<i>Obligatory Outcome 1</i>	Responsive monitoring and evaluation of project activities.
<i>Obligatory Outcome 2</i>	Enhanced staff capacity to implement and manage project activities.
<i>Obligatory Outcome 3</i>	Responsive exchange of communication with government and stakeholders.

**Table 3: 24 measurable outputs planned and realized:**

~ Community Empowerment consultant recruited and contract signed	~ Evaluation of training program conducted	~ Monitoring & Evaluation plan with clear targets for parents training workshops, counselling and psycho-social support developed	~ Participants signed learning contracts
~ Training coordinator recruited	~ Participants met to discuss progress and challenges	~ Reporting systems developed for trainers and counsellors	~ Monthly staff appraisal system developed and carried out

~ Workshop manual developed	~ Participants referred violent crimes survivors-caregivers-stakeholders to Lungelo for intervention	~ Action plan developed for parents and children to monitor responsiveness of intervention	~ Project milestones internally appraised
~ First 3-day workshop conducted	~ 40 Volunteers recruited from participants who completed the training	~ Recording/archiving system for service user records established	~ Project launch attended by government, UNODC representatives and stakeholders
~ Second 3-day workshop conducted	~ Volunteers attended awareness campaign briefing session	~ Social worker, training coordinator, administrator job profiles developed	~ Project quarterly written reports submitted to the government (DSD) & UNODC and appraised
~ Third 3-day training workshop conducted	~ Awareness campaign logistics outlined, organized and realized	~ Induction course for two social workers, training coordinator, administrator developed	~ Project closing ceremony planned and realized

## THE LEARNING COURSE STRUCTURE

Ms Nongo Cynthia M. Mothamaha Phiri was recruited as the Community Empowerment consultant and contract signed on January 12, 2010. The consultant's mandate was to design the TIA Training Manual, Monitoring and Evaluation (M&E) Tools and Formulate process-oriented evaluation systems. TIA's context-sensitive acid test would be its inclination to resonate with Ubuntu (humaneness) constructs of respect, relationship, sharing, interdependence, to name but a few (Lebese & Phiri, 2012, p. 62). Ubuntu is an African philosophy, an object of knowledge and an analytical tool for Community Empowerment Initiatives (CEIs). Thol'ulwazi. Mawere (2012, cited in Nkuna, 2013) stated "It is generally believed that in pre-colonial African societies, the concept of Ubuntu was instrumental in maintaining social cohesion, administering peace and order for the good life of everyone in the society and even strangers (p. 339).

While the design of the TIA manual was context-specific and explorative ethical integrity was ensured. Throughout the training processes the principles of adult education were applied in that students were encouraged to take full responsibility for their own learning. That meant to achieve maximum benefit from the training, full attendance, punctuality and participation was required. This principle was made clear to the participants prior to the commencement of the training. The course was presented over a period of three days of seven hours each, according to the scheduled time-table. To enhance the principle of service user participation, the training presentation modalities were interactive and included various approaches such as audio tapes, group discussions, and debates. Throughout the training program learners were expected to do prior reading from the course manual. The following section describes the training content, processes and evaluation, respectively.

### Content and process

The three-day TIA Manual content focused on the following five context-specific themes: Human relationship building skills; conflict management skills; responsive parenting skills; leadership integrity; living a purpose-driven life. Each day focused on different life course challenges, with interactive parent-child homework tasks and mutual support.

Given that the training was skills-based, a period of two weeks was scheduled to allow the participant-learners an opportunity to practice the newly acquired skills in their respective natural environments. A two-day follow-up workshop was organized, aimed at enhancing conscious reflections, debriefing and encouraging continued practice of skills learnt. Discussions, brainstorming and planning of activities to reach out and empower a minimum of 400

families residing in Soweto and neighboring communities during and post training sessions planned and implemented. A two-day Child Protection Awareness Campaign was planned and realized during the National Annual May Child Protection Week. A one-day Women's Day Celebrations planned and realized during the Annual August National Women's month. The two activities were geared at leveraging visibility for the Thol'ulwazi Project and to arrest public attention regarding Child Protection related issues with reference to violent crimes Survivor Empowerment Programs, referred to by the government as Victim Empowerment Program (VEP). The invaluable support of European Union (EU), United Nations Office of Drugs and Crime (UNODC) and the Department of Social Development (DSD) was always publicly acknowledged.

## Tracking TIA responsiveness

The one function of evaluation is assisting the stakeholders to make informed decisions. According to McKendrick (1989: 32 cited in Lombard 1991) "A good understanding of the evaluation process not only leads to effective measurement *per se*, but also to connecting the measurement of outputs to the eventual product, namely, a better service" (p. 270). Participants were males and females aged between 20 – 66 years mainly Soweto residents. Among the participants were local and international NGO representatives, government and political organizations employees. Others indicated that they were attending the training on their personal capacities as concerned community members. The training evaluation report revealed that 95% of participants learnt about Thol'ulwazi Project by Word-of Mouth and indicated their willingness to recommend it to family members, friends and colleagues elsewhere. The following sketch seeks to sum up TIA milestones to enable the reader to opine on its responsiveness. It is a brief overview that promises to do no more than provide highlights of the terrain traversed by TIA. Real people's lives were touched and transformed through everyday social interactions and TIA moments that span a decade.

**Table 3: Tracking TIA responsiveness (a decade later)**

<b>Thol'ulwazi Intervention Approach: Best interest of the child milestones</b>
1. The Daily Sun Newspaper Front Page Coverage earned on February 20, 2010: 5 million Newspaper Readership
2. Community Radio Station – Jozi FM Live Talk Show aired on February 13, 2010: 5 million Radio Station Listenership
3. Soweto TV Station Muntuza Program aired during the May National Child Protection Week on May 29, 2010: 3 million Viewership
4. Thol'ulwazi Graduate-Ambassadors Groups 1,2, 3, and 4 that started and successfully completed the training program: 183
5. Thol'ulwazi Graduate-Ambassadors: first-hand narratives captured in the participants encounters
6. A decade later: School-Based ongoing education and support session available at targeted local schools, public health care facilities or clinics, and a local Community Radio Station.

## Encounters with TIA: First-hand narratives of touched lives

This section focuses on context-specific narratives of participants aged between 31-71 years who tell and show us that their lives have been touched in meaningful ways through their respective encounters with Thol'ulwazi Intervention Approach. A decade later. While the TIA manual design was explorative and contextual ethical integrity was ensured. To make sense of the respondents' narrative accounts Narrative Analysis (NA) was used. For Riessman (1993) "Locating narratives of personal experience for analysis is not difficult. They are ubiquitous in everyday life. /.../ Respondents narrativize particular experiences in their lives, often where there has been a breach between ideal and real, self and society" (p. 2-3). Purposely selected from 183 Thol'ulwazi graduates, the following 14 narratives are sequenced as real name and surname, age, Thol'ulwazi encounter year and group number:

1. Busisiwe Gumbi, (31) 2010 – Group 2: *“After completing Grade 12 I did not know what to. I spent two years not studying and then I was recruited to join Thol’ulwazi. After participating in Thol’ulwazi I learnt so much about myself. I then developed an interest in the Social Work profession. A year later I enrolled for a Social Work degree. Now I am a qualified social worker in full time employ”.*
2. Hlengiwe Sithole, (42) 2009: *“I was a volunteer at Lungelo at the time. Thol’ulwazi helped me develop an interest in social work profession. First I acquired a one-year Social Auxiliary Work Certificate, and presently (2019) I am completing a level four Social work Degree at the University of South Africa”.*
3. Venessa Mpangele, (31) 2010 - Group 2: *“When I joined the program I was passive regarding social ills in my community. Post-Thol’ulwazi I started getting involved in community structures and I continue to influence a lot of my peers and neighbours on how to be actively involved in their children’s relationship and life course in general”.*
4. Norah Sylvester, (57) 2010 - Group 1: *“Unemployed at the time, I have developed to be an activist in my community. I work with women and children who have experienced violent crimes in their lives and refer them to relevant institutions”.*
5. Busisiwe Buthelezi, (65) 2010 - Group 1: *“I acquired a 12-months Auxiliary Social Work Certificate and relevant employment. Currently I am serving as a Board Member at Lungelo”.*
6. Simphiwe Mngomezulu, (43) 2010 - Group-3: *“I decided to become Abanumzane Abaqotho (men of integrity) program advocate. Thol’ulwazi helped me immensely to work on and improve my parent-child relationship for the better”.*
7. Nomfundo Msomi, (31) 2010 - Group 1: *“I was an unemployed youth at the time, and now I am a volunteer at different Community-Based Organizations where I work as a facilitator and a community worker”.*
8. Duduzile Zulu, (71) 2010 – Group 1: *“Thol’ulwazi helped me improve parental relationship with my own children and grandchildren. I have been able to correct the mistakes I did as a young mother raising my children. So, Thol’ulwazi helped me restore broken relationships in my family”.*
9. Malibongwe Zwane, (71) 2010 – Group 3: *“As a traditional healer, I come into contact with families with children who have experienced sexual violence, I have been able to assist these families by referring them to Lungelo and have engaged with men on several occasions about the importance of being active in their children’s lives”.*
10. Cebi Rallele, (45) 2009: *“At the time I was employed as a training facilitator at Lungelo and have since progressed to acquire a Teacher’s Diploma. I am presently employed as a permanent High School teacher. Because of Thol’ulwazi Project I can identify abused learners at school with ease”.*
11. Nonhlanhla Malunga, (44) 2010 – Group 2: *“I am presently working with women in my local community where I facilitate talks on sexual violence and teenage pregnancy”.*
12. Pinky Mashele, (62) 2010 – Group 2: *“Thol’ulwazi has helped me improve relationship and communication skills with my children. I also started my own business which partly, I credit to Thol’ulwazi. As an ambassador of the program, I was exposed to different potential business opportunities, which is how I got introduced to entrepreneurship”.*
13. Oupa Mokgomo, (34) 2010 – Group 3: *“When I joined the program I did not have children. Now that I have my own child, I am so happy to apply all the knowledge I acquired from Thol’ulwazi. I notice a vast difference between how my friends and I were raised and how I am raising my daughter. I am also employed as a training facilitator”.*
14. Tina Bhengu, (65) 2010 – Group 2: *“I was unemployed when I joined the program and I did not believe in myself. Through Thol’ulwazi my confidence improved. I got employed at the Trauma Centre of a local Police Station where I work with abused women and children”.*



## CONCLUSION

Engaging the decade-long Thol'ulwazi Story to advocate for the *state-violence* proposition creates a possibility to challenge hegemonic conceptualizations of violent crimes in South Africa. It is our conviction that by paying attention to dynamics of local context there is recognition of the more complex picture of lived experiences of violent crimes that acknowledge 'universality and particularism'. This paper seeks to contribute to nuanced understandings and debates of geo-historical particularities of the genesis of violent crimes in South Africa. TIA tells us that while contemporary violent crimes issues are too complex for the responsibility to be laid on the shoulders of the government, it is the responsibility of all and sundry both within and outside the Non-Profit sector where Lungelo is embedded. To advance the 'Best interest of the child' principle for survivors, caregivers and stakeholders of violent crimes, it seems reasonable to suggest that the Thol'ulwazi Project story makes a clarion call for Higher Education Institutions (HEIs) to leverage their context-sensitive knowledge-generation power to resource project managers and public policy makers to render Restorative Justice trajectory service programs on a continuum of survivor-caregiver-stakeholder, particularly for indigenous people of African descent since they were on the receiving side of the brutality of the colonial apartheid rule. In the final analysis, this is a constitutional policy imperative.

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# SERVICE ENCOUNTERS IN THE RESTAURANT INDUSTRY IN ZIMBABWE

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## ABSTRACT

*Service encounter experience is an emerging concept in the field of services marketing. Despite the worldwide importance of the restaurant industry, there is a lack of research, specifically within emerging markets, regarding service encounter experiences in the industry. The primary objective of this study is to determine the patronage outcomes of service encounter experiences of restaurant patrons in Zimbabwe. A convenience sample of 400 respondents completed a self-administered questionnaire. Positive statistically significant relationships exist between service encounter experiences and both re-patronage intention and patronage loyalty. Through this, Zimbabwean restaurants should ensure that their patrons' service encounters are satisfactory, as this may ultimately improve these restaurants' success.*

**Keywords:** patronage loyalty, patronage retention, re-patronage intention, service encounter experiences.

## INTRODUCTION AND RESEARCH PROBLEM

African economies in general, and the Zimbabwean economy in particular, are growing at an accelerated pace regarding service orientation. Often, over half of the Gross Domestic Product (GDP) of developing countries is contributed by the services sector (Cali, Ellis & Velde 2008, p. 2). Zimbabwe's service sector contributed 56.29% towards the country's GDP in 2017 (Statista 2017). In services industries, exchange value is created when patrons interact with contact employees and service facilities, in what is known as service encounters (Lin & Mattila 2010, p. 823; Lovelock & Wirtz 2011, p. 68).

The restaurant industry is triggering the growth of the services economy in Zimbabwe. The restaurant industry is in general lucrative, important to the economy and highly competitive (Andaleeb & Conway 2006, p. 3). Restaurants compete on the basis of food quality, service delivery quality, and ambience factors (Samadi 2011, p. 18). However, in the changing Zimbabwean restaurant industry, other factors, such as the service encounter experiences of patrons may also influence the success rate of these businesses.

The attainment of a maturity status by the restaurant industry in Zimbabwe coupled with its fragmentation (Hill, Jones & Schilling 2013, p. 66, 81) has led to the extreme standardisation of the core restaurant services. There is also an ongoing influx of competitive restaurants in most urban centres and tourist resort areas in Zimbabwe (Zimtrade 2014). In most restaurants, meals had become inevitably uniform due to ubiquitous recipes easily accessible to most operators (Wall & Berry 2007, p. 59). This led to service encounter experiences being the most viable alternative for differentiation and a competitive advantage within the restaurant industry (Ariffin, Bibon & Abdullar

2011, p. 35). However, despite the importance of the restaurant industry to the Zimbabwean economy, there is a lack of research in the global emerging market context, regarding the patronage outcomes of service encounter experiences.

## RESEARCH OBJECTIVES

The primary objective of the study is to determine the patronage outcomes of service encounter experiences of patrons in the restaurant industry in Zimbabwe. Identifying the relationships between service encounter experiences and selected patronage outcomes, including patronage intention, re-patronage intention and patronage loyalty, creates opportunities to positively influence patrons' support of Zimbabwean restaurants. Therefore, the study aims to propose recommendations to restaurants in Zimbabwe on how to use service encounter experiences to increase patron support and the success of these businesses.

## LITERATURE REVIEW

This study draws on a patronage retention model conceptualised by Zeithaml, Bitner and Gremler (2013, p. 77), the theory of reasoned action (Ajzen 1991), the social exchange theory (Blau 1964) and marketing literature that has identified attitudinal post dining behavioural constructs as outcomes of service encounter experiences (Hwang & Hyun 2012, p. 65).

### Service encounter experiences

The origins of the construct service encounter experiences are found in the works of Pine and Gilmore (1998). An experience is a situation where a patron has a sensation as a result of interaction with elements in a context generated by a service provider (Otengei, Changha, Kasekende & Ntayi 2014, p. 82). This key construct in services marketing (Ismail, Melewar, Lim & Woodside 2011, p. 205) is also referred to as dining experience in the restaurant industry context (Hwang & Hyun 2012, p. 661; Ariffin *et al.* 2011, p. 35; Wall & Berry 2007, p. 60).

Since many services and products have become homogeneous, businesses are resorting to the use of service encounter experiences as a competitive tool to differentiate and compete (Petermans, Janssens & Van Cleempoel 2013, p. 1). Marketing trends meet patrons' needs and wants through staging pleasant service encounter experiences (Hwang & Hyun 2012, p. 659). A service encounter is the interaction between a patron and a service during the service delivery period or refers to what a patron goes through during a service consumption process (Jang & Numkung 2009, p. 453). A service encounter is also viewed narrowly as a dyadic interaction between contact employees and patrons (Bradley, Sparks, McColl-Kennedy, Jimmieson & Zapf 2010), and broadly as a triadic interaction between a service business, contact employees and patrons (Jayawardhena, Souchon, Farrell & Glanville 2007; Lin & Mattila 2010). In the restaurant industry patrons' experiences are not generated from eating food alone, but from all events and activities that takes place during the service encounter (Mhlanga, Hattingh & Moolman 2015, p. 143; Ariffin *et al.* 2011, p. 35). For the purpose of this study (based on the discussion above and a definition by Mhlanga *et al.* 2015, p. 144), a service encounter experience of a restaurant patron is the period between the time a patron enters a restaurant to the time he/she departs from the restaurant, and includes all the aspects relating to the interaction between the patron, the service and the service employees.

Service encounter experiences are staged (Pine & Gilmore, 1998, p. 4), co-created (Ismail *et al.* 2011, p. 207), memorable (Pine & Gilmore 1998, p. 3), subjective (Hwang & Hyun 2012, p. 659), context specific (Petermans *et al.* 2013, p. 4), and induced by service dimensions (Hwang & Hyun 2012, p. 660). This means that service encounter experiences will result in outcomes, both for patrons and businesses.

### Outcome of service encounter experiences: Patronage retention

Patronage retention flourishes in saturated markets like the restaurant industry where businesses rely more on repeat business than on business from newly acquired patrons (Egan 2011, p. 74). Many academics and practitioners agree that patronage retention should be given more prominence over patronage acquisition (Egan, 2011, p. 74; Zeithaml *et*

*al.* 2013; Hoffman, Bateson, Wood & Kenyon 2009, p. 346). Patronage retention is defined as marketing efforts directed to existing patrons (Hoffman *et al.* 2009, p. 346) or the psychological commitment of a patron towards a brand or a business, such as a restaurant (Han & Ryu 2009, p. 492). Patronage retention is located within the broader construct of relationship marketing (Egan 2011:74; Gummesson 1999, p. 9).

The Zeithaml *et al.* (2013, p. 477) model shows that patronage retention leads to lower service delivery costs, higher volumes of purchases, price premiums, positive word-of-mouth communication; as well as obtaining useful information (Hoffman *et al.* 2009, p. 346). Patronage retention is less expensive than patronage acquisition (Gummesson 1999, p. 183), due to lower personal selling expenditures, service recovery costs, administrative and marketing costs (Egan 2011, p. 76; Godson 2009, p. 72, 76-78).

Patronage retention is a function of patronage satisfaction and pleasant service encounter experiences (Godson 2009, p. 81). The influence of Zimbabwean restaurants' service encounter experiences on patronage retention is investigated in this study by empirically testing the following hypothesis:

H<sup>1</sup>: There is a significant relationship between service encounter experiences and patronage retention.

## **Outcome of service encounter experiences: Re-patronage intention**

Re-patronage intention is another post-dining behavioural intention in the restaurant services context (Hwang & Hyun 2012, p. 665). Re-patronage intention is conceptualised as the patrons' likelihood to re-visit a specific service outlet (Khan, Aadean, Salman, Nadeen & Rizwan 2016, p. 87; Hwang & Hyun 2012, p. 665), and considers the frequency with which patrons get services from the same service business. Re-patronage intention has been specified as an indicator of actual re-patronage behaviour (Jang & Namkung 2009, p. 454).

This relationship between service encounter experiences and re-patronage intention is drawn from the theory of reasoned action (Ajzen 1991), which assumes that normative behavioural intentions are regulated by attitudes developed towards an object. In the context of services consumption, it assumes that service encounter experiences generate emotions which elicit attitudes that later transform into behavioural intentions, including re-patronage intention.

The notion that service encounter experiences influence and sustain re-patronage intention is widely accepted in the extant services marketing literature (Egan 2011, p. 58). Previous research revealed that re-patronage intention is an outcome of pleasant service encounter experiences (Hwang & Hyun 2012, p. 665). The influence of Zimbabwean restaurants' service encounter experiences on re-patronage intention is investigated in this study by empirically testing the following hypothesis:

H<sup>2</sup>: There is a significant relationship between service encounter experiences and re-patronage intention.

## **Outcome of service encounter experiences: Patronage loyalty**

Patronage loyalty is defined as patrons' preferences and dispositions towards services or products in a competitive business environment (Egan 2011, p. 57). Patronage loyalty refers to the behaviour exhibited by patrons where they consistently patronise the same business, in a market where there are a considerable number of alternative businesses to support (Sharmeela-Banu & Gengswari 2013, p. 87). Patronage loyalty is distinguished from re-patronage intention in that re-patronage intention's focus is on the frequency with which a patron gets services from the same service business while patronage loyalty is inclined towards the psychological aspects linked to a patron's support, for example a patron's attitude towards a service on offer (Egan 2011, p. 57). However, a major theme found in both patronage loyalty and re-patronage intention is that they are both expected to translate into purchase behaviour (Egan 2011, p. 57).

The social exchange theory (Blau 1964) provides a basis for proposing a relationship between service encounter experiences and patronage loyalty. The idea behind this theory is that when a patron attains a favourable service encounter experience, it generates a state of indebtedness that has to be reciprocated to restore equilibrium in a service encounter (Tsai 2001, p. 501). This implies that when a patron receives a pleasant service encounter

experience, it creates a “debt” that patrons can repay through patronage loyalty. The influence of Zimbabwean restaurants’ service encounter experiences on patronage loyalty is investigated in this study by empirically testing the following hypothesis:

H<sup>3</sup>: There is a significant relationship between service encounter experiences and patronage loyalty.

## RESEARCH METHODOLOGY

This exploratory study used a quantitative approach to identify the relationships between service encounter experiences and the selected patronage outcomes. The quantitative research design was deemed appropriate since the study used a structured questionnaire to gather responses from a large sample, and statistically tested hypotheses (Struwig & Stead 2013, p. 3-4). Clow and James (2015, p. 111) states that quantitative studies are often used to consider consumers’ behaviour and attitudes. This gives additional support to the quantitative methodology followed for this study which considers the perceptions of patrons (restaurants’ consumers).

The study’s target population include all patrons of restaurants in Zimbabwe. As no sample frame exists, the researchers used the non-probability convenience sampling technique (Struwig & Stead 2013, p. 116) to select a sample from the city of Harare. The researcher and fieldworkers approached restaurant patrons after they enjoyed meals. All research ethical aspects were considered. A self-developed and self-administered English questionnaire was developed as the study’s measuring instrument. The questionnaire items were developed based on literature. Section A consisted of 58 items that gathered respondents’ perceptions about service encounter experiences and the selected patronage outcomes. Section A used an ordinal seven-point Likert-type scale ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (7). Section B used nominal scales to gather biographic and demographic data of the respondents, including their gender and age as well as comprised of items relating to how often they visit restaurants, their reasons for visiting and their restaurant expectations. Academic experts scrutinised the measuring instrument to ensure face validity. The content validity of the measuring instrument was ensured by conducting a pilot study among 20 potential respondents.

Microsoft Excel and Statistica (Version 13) were used to conduct the data analysis. The study calculated descriptive statistics in order to summarise the information about the sample (Struwig & Stead 2013, p. 165). Exploratory Factor Analyses (EFA) were conducted to determine the construct validity of the measuring instrument. Items with factor loadings of at least 0.4 were considered as valid (Hair, Black, Babin & Anderson 2014, p. 115). Cronbach’s alpha coefficients were computed to test the reliability of the measuring instrument. Cronbach’s alpha coefficients equal to or greater than 0.70 were regarded as reliable (Hair *et al.* 2014, p. 123). Descriptive statistics relating to the variables were calculated (Struwig & Stead 2013, p. 165) and Pearson’s Product Moment Correlations were calculated to determine the variable correlations (Lind, Marchal & Wathen 2012, p. 463). Finally, multiple regression analyses were conducted to test the influence of service encounter experiences (independent variable) on the selected patronage outcomes (dependent variables). The regression analyses made it possible for the researchers to identify whether significant relationships exist between the variables (Hair *et al.* 2014, p. 157), and to thus test the hypotheses formulated.

## EMPIRICAL RESULTS

### Sample description

A total of 400 questionnaires were collected and usable for analysis. Among the respondents 57% were males, while 43% were females. The main age groups were distributed as follows: 51% (20-29 years) and 23% (30-39 years). Most respondents were single in terms of marital status (45%) and 40% had a partner or were married with more than 3 children living at home. In terms of frequency of dining, 47% visited restaurants more than once a month but not weekly, whereas 28% visited restaurants at least once per week. Lastly, in terms of the preferred reservation methods, 57% of the respondents preferred to make reservations in person and 24% preferred telephone bookings.

## Validity and reliability results

In terms of the EFA results, items loaded onto three distinct factors (see Table 1).

**Table 1: Validity and reliability results.**

Factor	Factor loadings range	CA
Service encounter experiences	0.623 – 0.768	0.920
Re-patronage intention	0.496 – 0.739	0.72
Patronage loyalty	0.613 – 0.812	0.85

Source: Researchers' own construct based on empirical results

All 13 items developed to measure service encounter experiences loaded together. The factor loadings ranged from 0.623 to 0.768. Due to all the items loading onto this factor focusing on service encounter experiences, this factor was labelled *service encounter experiences*. For the purposes of this study, based on the items' loading, *Service encounter experiences* is defined as the feelings or knowledge that is acquired by patrons when they interact with staff in a restaurant context, relating to different elements, for example reservations, menu options and meals. The Cronbach's alpha coefficient for *Service encounter experiences* was 0.92.

Four of the five items developed to measure re-patronage intention loaded onto a single factor. The other re-patronage item cross-loaded and was eliminated from further analyses. In addition, one item developed to measure patronage retention also loaded onto this factor. The loading of this item shows that respondents' re-patronage intention relates to whether they have to make restaurant reservations before visits. Based on the fact that this factor's items related to patrons' intention to re-visit restaurants, the factor was labelled *Re-patronage intention*. For this study, *Re-patronage intention* is defined as patrons' articulated likelihood to repeat the same patronage behaviour, thus it relates to their intention to re-visit a specific restaurant. The Cronbach's alpha coefficient of this factor was 0.72.

All five of the items developed to measure patronage loyalty loaded onto a single factor. In addition, one item originally developed to measure patronage retention also loaded onto this factor. This loading can be explained, since it shows that respondents' loyalty to a restaurant will remain until the restaurant closes down. Since all the items of this factor related to patrons' loyalty, the factor was labelled *Patronage loyalty*. In this study, *Patronage loyalty* refers to the behaviour exhibited by patrons where they consistently patronise the same restaurant, in a market where there are a considerable number of alternative restaurants to support. This factor's Cronbach's alpha coefficient was calculated as 0.85.

The EFA and Cronbach's alpha coefficient results confirm the validity and reliability of the study's factors, and therefore its measuring instrument. It is evident that, excluding the two items mentioned above, no other patronage retention item loaded onto factors. Therefore, this factor was eliminated from the study's hypotheses and further analysis. Based on the EFA results, the revised hypotheses are as follows:

H<sup>1</sup>: There is a significant relationship between *Service encounter experiences* and *Re-patronage intention*.

H<sup>2</sup>: There is a significant relationship between *Service encounter experiences* and *Patronage loyalty*.

## Descriptive statistics and relationships between variables

As evident from Table 2, the mean scores for all the factors (all above 4.96) indicate that the respondents agreed with the factor statements. The small standard deviations (Std. dev.) for the factors also highlighted little variation between the responses. The responses for the factor Service encounter experiences (1.09) varied the least and the responses for the factor Patronage loyalty (1.33) varied the most. Positive correlations exist between all the factors. The highest positive correlation exists between Service encounter experiences and Re-patronage intention ( $r=0.713$ ). This implies that the respondents associate their service encounter experiences in restaurants with their re-patronage intention towards these restaurants.

**Table 2: Descriptive statistics of the variables and Pearson correlations.**

Variables	Mean	Std. dev.	1 SEE	2 RPI	3 PL
1 Service encounter experiences	5.19	1.09	1.000		
2 Re-patronage intention	5.11	1.33	<b>0.713</b>	1.000	
3 Patronage loyalty	4.97	1.18	<b>0.670</b>	<b>0.621</b>	1.000

Source: Researchers' own construct based on empirical results

The multiple regression analyses show that the independent variable (*Service encounter experiences*) statistically significantly influences *Re-patronage intention*, where  $b=0.773$ ,  $p<0.001$ ,  $R^2=50.82\%$ . This means that when patrons' service expectations are met by restaurants during service encounters, patrons are more inclined and motivated to re-visit the restaurants. In addition, *Service encounter experiences* statistically significantly influences *Patronage loyalty*, where  $b=0.823$ ,  $p<0.001$ ,  $R^2=44.85\%$ . This reveals that when patrons' service expectations are met by restaurants during service encounters, patrons are loyal towards, and will remain patrons, of the restaurants. Hypotheses H<sup>1</sup> and H<sup>2</sup> are accepted, as it is evident that positive, enjoyable service encounter experiences in restaurants lead to improved levels of re-patronage intentions and patronage loyalty among Zimbabwean restaurant patrons.

## MANAGERIAL IMPLICATIONS AND CONCLUSION

This study differed from, and had similarities with, previous studies. Previous studies focused on patronage outcomes only in the context of patronage satisfaction (Lemon & Verhoef 2016, p. 71). The study's results also differed from the results of Mattila (2001) that found a relationship between service encounter experiences and patronage retention. Whilst there are several other patronage outcomes in the extant marketing literature, the patronage outcomes of service encounter experiences identified in this study are re-patronage intention and patronage loyalty. The results related to these two patronage outcomes confer with studies by Hwang and Hyun (2012) and Otengei *et al.* (2014).

*Re-patronage intention* is an outcome of service encounter experiences, therefore:

- The location of a restaurant must be within a reasonable distance to parking areas and public transport.
- All patrons should be allowed to visit and dine in a restaurant with or without making reservations.
- Restaurant dining should be financially viable for restaurant owners as well as cost effective for patrons. Prices should include a reasonable profit margin while being within an acceptable price range for patrons.
- Train restaurant staff to be courteous and address patrons' complaints in a friendly manner.

Positive service encounter experiences enhance *patronage loyalty*, therefore:

- Focus on ensuring repeat purchases by loyal patrons. Repeat purchases could be encouraged by providing discounts for repeat visits (e.g. through loyalty cards).
- Encourage positive word-of-mouth messages through online (e.g. social media) competitions where patrons can win free/discount meal vouchers for messages they post about a restaurant.
- Post positive messages on social media to improve the image of the restaurant.

Despite these recommendations, the main limitation of this study relates to it being a cross sectional study, and there is a possibility that patrons' views may change due to changing preferences, technology, the economy and globalisation. A future longitudinal study, to identify changing and current trends, would add value. A conclusion drawn from this study is that patrons in the restaurant industry do not view their patronage intention as being separate to their re-patronage intention and patronage loyalty. The study also concludes that re-patronage intention and patronage loyalty result from restaurant patrons' service encounter experiences. It is therefore imperative for the restaurant industry to implement the recommendations in this study to improve their patrons' service encounter experiences, since pleasant service encounter experiences influence two studied patronage outcomes, namely re-patronage intention and patronage loyalty. The implementation of this study's recommendations could lead to more



successful Zimbabwean restaurants, and possibly also increase success in other developing countries with similar restaurant industries.

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# IDIOSYNCRATIC DEALS AND PSYCHOLOGICAL CONTRACT FULFILMENT FOR OLDER WORKERS: THE MEDIATING ROLE OF ENTITLEMENT AND OBLIGATION

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## ABSTRACT

*Mixed results for idiosyncratic deals have raised concerns about the dominant social exchange theoretical lens used to examine them. To address this concern, the researcher developed a conceptual model to test the mediating effect of obligation and entitlement on the relationship between idiosyncratic deals and psychological contract fulfilment. A cross-sectional survey-based design was followed, and data gathered on subjects 50 years of age and older in South Africa. The research makes an original contribution by showing a strong relationship between idiosyncratic deals, as a second order construct and psychological contract fulfilment, mediated through a high-quality exchange relationship and not through obligation as posited by the social exchange paradigm.*

**Keywords:** Idiosyncratic Deals, Entitlement, Obligation, Psychological Contracts, Psychological Contract Fulfilment, Older Workers.

## INTRODUCTION

The challenges brought about by an ageing workforce is one of the most pressing human resources issue to arise during the last decade (Kooji, de Lange, Janssen & Dijkers, 2008). In response to this challenge, organisations have implemented human resource practices designed to specifically retain and motivate older workers to remain in the workforce and has given rise to a rapid increase in individualised work arrangements, known as idiosyncratic deals (Rousseau, 2006). Idiosyncratic deals are special or unique deals of a nonstandard nature, that are voluntarily negotiated between employees and employers with terms that are described as being mutually beneficial to each party (Miner, 1987; Rousseau, Ho & Greenberg, 2006). Existing research on idiosyncratic deals and older workers is limited. This is interesting, given the established positive association between age and increased heterogeneity. Idiosyncratic deals have been found to positively motivate employees to work beyond retirement (Matthijs Bal, de Jong, Jansen, & Bakker, 2012) and older worker employability (Bal, Oostrom & Pennings, 2016).

### Idiosyncratic deals and outcomes

Idiosyncratic deals research garnered greater credibility through the work of (Rosen et al., 2013) who expanded idiosyncratic deals from the three dimensions outlined by (Rousseau, et., 2006) to four dimensions, namely schedule flexibility, location flexibility, task and work responsibility and financial incentives. Existing research on idiosyncratic deals has seemed to favour measuring only one or two types of idiosyncratic deals. Gerrero, Bentein and Lapalme, (2014) used development ideals only. Rousseau, Hornung and Glaser (2008) used flexibility and developmental items only. Bal et al., (2012) and Liu et al., (2013) also only used developmental and flexibility idiosyncratic deals.

Importantly, Liao et al., (2016) argue that the appropriateness of examining idiosyncratic deals as distinct variables or as a single theoretical concept depends on the nature of the research question being answered. This orientation of idiosyncratic deals is also in line with the notion of an aggregate multidimensional construct made up of specific content dimensions (Edwards, 2001). Research on idiosyncratic deals has shown positive individual level outcomes, such as organisational citizenship behaviour (Anand et al., 2010), job satisfaction (Rosen et al., 2013), commitment (Hornung, Rousseau, Weigl, Mueller, & Glaser, 2014) and they have been shown to positively impact work design and outcomes (Hornung et al., 2014). Idiosyncratic deals for older workers have been linked to increased motivation to work beyond retirement (Bal et al., 2012) and the employability of older workers (Bal et al., 2015). Many of the outcomes of idiosyncratic deals research are simplistic attitudinal and behavioural. The question of whether the granting of idiosyncratic deals leads to psychological contract fulfilment has not yet been answered in the literature. This leads to the following hypothesis:

*H<sub>1</sub>: Idiosyncratic deals positively influence psychological contract fulfilment*

## **Mediational effect of entitlement and obligation**

Despite a positive bias towards idiosyncratic deals in the literature, studies have also shown mixed or contrasting results (Bal et al., 2012; Rosen et al., 2013). Social exchange theory, underpinned by norm of reciprocity is the dominant theoretical lens used to study idiosyncratic deals but may be too broad a theoretical framework to fully explain the complex mechanism linking idiosyncratic deals with outcomes (Liu et al., 2013). An emphasis on the inducement-exchange relationship inherent in the social exchange perspective largely represents that employer view and fails to consider the psychological dynamics of the employee when they receive idiosyncratic deals. And as such, little is known about why employees respond to idiosyncratic deals (Ng & Feldman, 2015). A central tenet of social exchange theory (Blau, 1964) and norm of reciprocity (Gouldner, 1960) is that individuals tend toward reciprocating contributions and favours towards partners even when not required to do so (Blau, 1964). Employees granted idiosyncratic deals will feel obligated to reciprocate through work attitudes and behaviours (Liao et al., 2014). However, it is important to consider that, whilst contribution is voluntary, and reciprocation is expected, it is not enforceable (Rosen et al., 2013). In their meta-analysis of idiosyncratic deals, Liao et al, (2016) make the point that idiosyncratic deals may not always generate reciprocity. Obligation is described as the individual belief in the owing of time, resources and consideration to society (Brummel & Parker, 2015). Obligation is most closely aligned with prosocial behaviour or the desire to benefit other people (Grant, 2008), and falls within a class of variables that deviates from self-interest (Brummel & Parker, 2015). This leads to the following hypothesis:

*H<sub>2</sub>: Obligation mediates the relationship between idiosyncratic deals and psychological contract fulfilment.*

An alternative orientation considers the role of Entitlement which has a noteworthy history in social science fields such as philosophy, political science and law. A common dimension that has been treated the same across fields is that entitlement refers to “what an individual feels they deserve” (Nauman, 2002, pg. 149). Campbell et al., (2004) argued for the conceptualisation of “psychological entitlement” or the stable and pervasive sense of deserving more and being entitled to more than others and developed the psychological entitlement scale to differentiate psychological entitlement from narcissism. Brummel and Parker (2015) approach entitlement as a more general construct, not always related to relative deservingness, but as an individual belief that they are deserving of society. The importance of entitlement in the management sciences is especially evident when considering that entitlement perceptions impact employee expectations and therefore also the nature of the exchange relationship between employees and employers (Naumann, 2002). There is a dearth of research examining the role of entitlement in explaining the relationship between idiosyncratic deals and outcomes. This leads to the following hypothesis:

*H<sub>3</sub>: Entitlement mediates the relationship between idiosyncratic deals and psychological contract fulfilment.*

## The influence of entitlement on obligation

Brummel and Parker (2015) cite the 1961 address by US President John F Kennedy who uttered the now famous exhortation, “Ask not what your country can do for you; ask what you can do for your country” as a call for citizens to focus on their obligations over their entitlements. The former refers to feelings of what is owed *to* society and the latter to feelings of what is deserving *of* society (Brummel, 2015). Two elements in the above statement are important in the context of this research, namely that people need to be encouraged to show prosocial behaviour, because it is assumed that people are naturally drawn towards feelings of self-interest (Miller, 1999). And, secondly, older workers are described as both actively involved with assisting of other people whilst at the same time also advocating their own self-interest (Hogan & Roberts, 2004). It is therefore likely that the tension, created by the competing effect of both entitlement and obligation may result in a ‘stalemate’ situation or a state of inactivity in which the older workers response to receiving idiosyncratic deals results in no effect at all. This leads to the following hypothesis:

*H<sub>4</sub>: Entitlement has a direct positive influence on obligation*

## Moderating effect of Reward vs. Inducement

The results of the research by Vidayarthi et al., (2013) confirms the importance of a convergence of employer and employee expectations when negotiating idiosyncratic deals. They make explicit the need for clear communication of employee desires on the one hand and what the employer expects in return for granting idiosyncratic deals on the other hand. In the absence of clear communication regarding mutual expectations it is unlikely that idiosyncratic deals will deliver the intended outcome. Therefore, an understanding of individual perceptions of what they are entitled to is critical in understanding the exchange between employee and employer (Naumann, Minsky, & Sturman, 2002). If individual perceptions are that idiosyncratic deals have been granted as a reward for a past contribution to the organisation, it is likely to increase the level of entitlement. This leads to the following hypothesis:

*H<sub>5</sub>: Idiosyncratic deals predicated on a reward for a past contribution moderates the mediating effect of entitlement (H<sub>3</sub>) on the relationship between idiosyncratic deals and psychological contract fulfilment such that the mediating effect of entitlement is stronger.*

When older workers perceive that they are valued by their organisation, they respond by ongoing participation in the organisation. Employees are more committed in relationships where employers show a long-term commitment (Tsui et al., 1997). This effect is especially important when considering how vulnerable older workers are to redundancy or involuntary retirement (Tempest & Coupland, 2016). This view considers the ongoing participation of the individual in the employment agreement and, as such, considers idiosyncratic deals based on an inducement for a future participation in the employment relationship. Therefore, if individual older workers perceptions are that idiosyncratic deals have been granted as an inducement for a future return to the organisation, it is likely to signal support and commitment to the individual and in so doing increase the level of obligation felt by the individual receiving idiosyncratic deals. This leads to the following hypothesis:

*H<sub>6</sub>: Idiosyncratic deals predicated on an inducement for a future return moderates the mediating effect of obligation (H<sub>2</sub>) on the relationship between idiosyncratic deals and psychological contract fulfilment, such that the mediating effect of obligation is stronger.*

## Mediational effect of exchange relationship quality

Research by Vidayarthi et al., (2010) concluded by emphasising that the way employees respond to idiosyncratic deals is partly a function of their workplace relationships. This view is supported by Liu et al., (2013) who make the point that idiosyncratic deals encompass information that shows the strength and quality of the employer-employee relationship and they represent an important exchange relationship. Drawing from disengagement theory (Cummings

& Henry, 1961) that suggests that as people age, they invest less in emotional relationships and work as they slowly withdraw from their role at work and in society. The process of disengagement is suggesting a symbolic preparation for retirement and ultimately for death. Using this theoretical orientation suggests that despite the positive initiating action of granting idiosyncratic deals, older workers will consider their psychological contract in short term, economic terms only. This orientation led to the development of the seventh hypothesis tested in the research.

*H7: Contractual psychological contracts mediate the relationship between idiosyncratic deals and psychological contract fulfilment*

Relational psychological contracts suggest a high-quality exchange relationship defined in social exchange terms such as concern for the welfare of the individual (Vidyardhi et al., 2010). Drawing from activity theory, Charles and Carstensen (2010) suggest that instead of disengaging from work, older workers remain active in many facets of working life and increasingly seek socially satisfying exchange relationships. This view is supported by Bal and Kooij, (2011) who found that age has also been linked to the type of psychological contract with older workers who exhibit high work centrality in their lives being linked to more relational type contracts (Bal & Kooij, 2011). Therefore, the value bestowed on idiosyncratic deals by older workers is evaluated in the context of the perceived support already provided them. This leads to the following hypothesis:

*H8: Relational psychological contracts mediate the relationship between idiosyncratic deals and psychological contract fulfilment.*

## METHOD

Data was gathered at an individual older worker level. Consideration was given to gathering data at an organisational level. However, psychological contract fulfilment is a proxy for the promises kept by the organisation and as such may be subject to bias if respondents feared reprisal from the organisation for answering negatively. A purposive snowball sampling technique was deemed the most appropriate sampling strategy to follow and ensured that respondents were from different sectors to compensate for any sector specific characteristics such as opportunities for career customisation, work life balance and satisfaction (Bal, Kleef & Jansen, 2015). An advantage of sampling different sector is to increase the variance in the type and amount of idiosyncratic deals (Bal, Oostrom & Pennings, 2016) and because the sample comprised participants from different sectors and different roles, the findings are encouraging with regards to generalisability across jobs (Rosen et al., 2013).

The questionnaire was compiled using [www.surveymonkey.com](http://www.surveymonkey.com) as it enabled access to many respondents but importantly allowed respondents to easily forward the link to their network via email, SMS or WhatsApp messenger or other social network platforms. A request to forward this survey onto members of your network aged 50 and older was included in the text of the email and messenger platforms. A total of 538 responses were received over a 6-month period from 13 March 2018 to 03 August 2018. Of these, 401 completed the questionnaire in full, representing a completion rate of 74.5%. A further 11 responses were removed as they indicated that they were not working, and an additional 40 responses were removed as they were below 50 years of age. This resulted in 350 completed, useable responses. The sample sizes in 11 previous research studies on idiosyncratic deals ranges from 65 participants (Lai et al., 2009) to 443 participants (Liu et al., 2013) with an average of 194 participants.

## Measures

All items were measured on Likert based scale. The questionnaire also included two qualifying questions namely, “what is your age?” and “are you currently working?”

*Idiosyncratic deals.* We used the scale developed by Rosen et al., (2013) and found the scale to be valid and reliable. financial incentives (Cronbach’s Alpha  $\alpha = .86$ ), Task and work responsibilities (Cronbach’s Alpha  $\alpha = .83$ ), Location flexibility (Cronbach’s Alpha  $\alpha = .89$ ), Schedule flexibility (Cronbach’s Alpha  $\alpha = .78$ ).

*Psychological contract fulfilment.* Was measured using the 12-item scale developed by Conway and Shapiro (2012). The scale has a four-item scale ranging from 1 (Not at all) to 4 (Completely) and shows a high consistency with a Cronbach's Alpha ( $\alpha = .90$ ).

*Obligation and Entitlement.* We used a 9-item scale developed by Brummel and Parker (2015). Obligation (Cronbach's alpha  $\alpha = .81$ ). Entitlement (Cronbach's alpha  $\alpha = .84$ ).

*Reward vs. Inducement.* The individual impression for the reason idiosyncratic deals were granted was measured using a single question, with respondents were asked to choose between "a reward for a past contribution" or "an inducement for a future return"

*Relational and contractual psychological contracts.* We used an 18-item scale with 9 questions for each construct developed by Raja et al (2004) which has a high level of reliability with a Cronbach's alpha score of ( $\alpha = .79$ ) for Relational and a Cronbach's alpha score of ( $\alpha = .72$ ) for Transactional.

## RESULTS

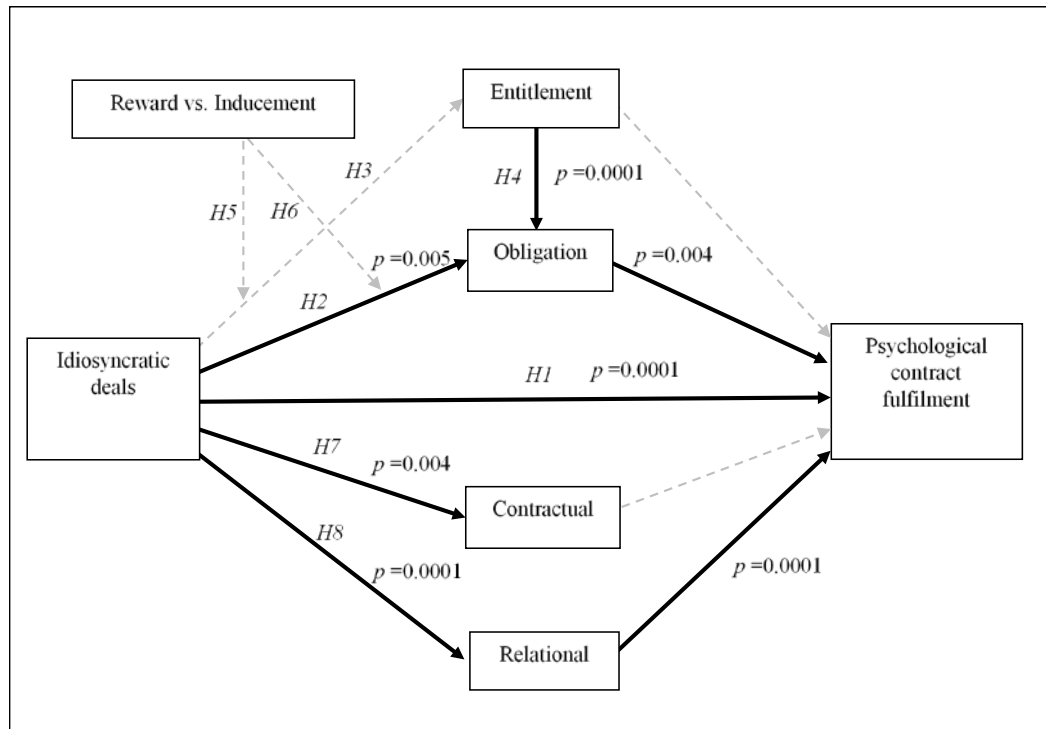
### Preliminary results

Kolmogorov-Smirnov and Shapiro-Wilk tests revealed statistically significant results for all items in the questionnaire. The data therefore did not exhibit univariate normality and as such models cannot be estimated using maximum likelihood method and for this reason, the MLM estimator was used (Muthen & Muthen, 1998-2017). The results of the Harman single factor test with Exploratory Factor Analysis in SPSS using Principle axis factoring revealed that although several factors emerged, of which the most variance explained by one factor was 27.46%, therefore common method bias was not a concern. Strong evidence was found to validate Idiosyncratic deals as a second order construct reflective of four first order factors namely; task and work responsibilities, schedule flexibility, location flexibility and financial incentives. A comparison of two measurement models (model 1: task and work responsibility, schedule flexibility, location flexibility and financial incentives as first order reflective constructs = BIC 12249.101) and (model 2: Idiosyncratic deals as a second order construct with four underlying dimensions = BIC 12241.183). Resulting in a Bayesian Information Criterion difference of 7.918 indicating strong evidence that idiosyncratic deals are a second order construct (Raftery, 1995). The structural model is shown in figure 1. Age and gender were controlled for. Obligation and relational psychological contracts were covaried as were entitlement and contractual psychological contracts. The measurement model fits the data reasonably well (RMSEA = 0.051, CFI = 0.908, TLI = 0.90, SRMR = 0.057).

### Hypothesis

*H1*, which stated that idiosyncratic deals would positively influence psychological contract fulfilment was fully supported (S.E 0.308\*\*\*,  $p < 0.0001$ ). To test whether obligation (*H2*) and entitlement (*H3*) fully mediated the relationship between idiosyncratic deals and psychological contract fulfilment, model 4 of the Process macro developed by Preacher and Hayes for SPSS was followed with bootstrap estimation at 10,000 and a 95% confidence interval. A small mediating effect was found for obligation (LLCI -0.040; ULCI -0.0001), despite the confidence for the direct and indirect effect not crossing 0, the partial mediating effect is so small that it borders on insignificant. This, despite a statistically significant relationship between idiosyncratic deals and obligation (S.E 0.175\*\*\*,  $p < 0.005$ ). A non-significant mediating effect was found for entitlement (LLCI -0.0005; ULCI 0.008), the confidence interval includes 0. Support was found for *H4*, which suggests a strong positive influence of entitlement on obligation (S.E 0.246\*\*\*,  $p < 0.0001$ ). Model 7 of the Process macro developed by Preacher and Hayes for SPSS was followed with bootstrap estimation at 10,000 and 95% confidence intervals to test *H5* and *H6*. A lack of support was found for the moderating mediating effect of reward vs inducement on obligation (Index 0.0048, LLCI -0.0048; ULCI 0.0072) and entitlement (Index 0.0009, LLCI -0.0065, ULCI 0.0229). *H7* which stated that contractual psychological contracts mediated the relationship between idiosyncratic deals and psychological contract fulfilment was not supported (LLCI -0.004; ULCI 0.034) but strong support was found for *H8*, the mediating effect of relational psychological contracts (LLCI 0.147; ULCI 0.282).

**Figure 1: Summary of the Results of the Structural paths.**



**Notes:**  $n = 350$ . Age and obligation (Estimate = 0.087, S.E = 0.047,  $p = 0.064$ ,  $t = 1.853$ ), Age and entitlement (Estimate = -0.126, S.E = 0.050,  $p = 0.012$ ,  $t = -2.520$ ) Gender and obligation (Estimate = 0.106, S.E = 0.050,  $p = 0.034$ ,  $t = 2.116$ ), Gender and entitlement (Estimate = -0.249, S.E = 0.048,  $p = 0.001$ ,  $t = -5.171$ )

## DISCUSSION

The majority of idiosyncratic deals studies have used one or more categories of idiosyncratic deals as part of their design, and whilst there are merits in doing so, there is also justification for the examination of idiosyncratic deals as a single, general concept (Liao et al., 2016). This is the first research to validate idiosyncratic deals as being a second order construct and then to use that second order construct as part of the overall research design. Scholars have suggested that idiosyncratic deals research can benefit by examining a broader range of outcomes (Liao et al., 2016). This research has answered that call by finding strong evidence to support a relationship between idiosyncratic deals and psychological contract fulfilment for older workers. However, in addition this research has potentially also found evidence to support an important defining characteristic of idiosyncratic deals, namely that they are mutually beneficial to the organisation and the individual (Rousseau et al., 2006). The findings of this research therefore close a gap in the literature (Liao et al., 2016) and provides support for the construct validity of idiosyncratic deals. This is the first research on idiosyncratic deals and older workers to provide an explanation for the mixed results in the idiosyncratic deals literature created by the predominant social exchange theoretical lens that has been used to date. This research makes the argument for the influence of entitlement on obligation as an explanation for the mixed results in the idiosyncratic deals literature and as an explanation for why idiosyncratic deals may not always generate reciprocity (Liao et al., 2016). Then, in line with activity theory, and in direct opposition to disengagement theory, this research has shown that idiosyncratic deals exert their influence on psychological contract fulfilment through high-quality exchange relationships and not through low-quality exchange relationships. The findings in this research support of the findings of Vidyarthi et al., (2010) who conclude that employers' benefit from developing high quality exchange relationships. And affirm the importance of employment relationship quality to older workers (Armstrong-Stassen, 2008; Bal et al., 2012)



## Limitations and suggestions for future research

A purposive sampling technique may also have introduced bias into the results and in so doing also affect generalisability of the result. However, this needs to be considered in the context of any bias that may have entered the research by directing the research via the organisation. To this end, by directly tapping the individual, it may also have improved the quality of the outcomes as participants were free to answer honestly, without fear of reprisal from their employer. This is especially important given that psychological contract fulfilment represents the individual view of the promises fulfilled by their employer. Then, whilst there is clear academic support for using considering idiosyncratic deals as a general concept, (Liao et al., 2016) with the various facets/ dimensions making up the idiosyncratic deal, it is not without trade-offs. The risk of using a composite approach, is that each dimension is given the same weighting and, as such, may not accurately reflect the overall dimensions affect accurately (Wayne et al., 2007). Whilst this research found no relationship between reward or inducement on the relationship between idiosyncratic deals and psychological contract fulfilment, future research could seek to understand why this may be case. Future studies could also consider a longitudinal design, where changes in entitlement and obligation are measured. This research only considered idiosyncratic deals that were successfully negotiated. Future research could also consider the idiosyncratic deals negotiation process. Consideration may be given to the length or difficulty of the process and whether this influences obligation or entitlement.

## Theoretical implications

This is the first research on idiosyncratic deals and older workers to provide an explanation for the mixed results in the idiosyncratic deals literature created by the predominant social exchange theoretical lens that has been used to date. This research makes the argument for the influence of entitlement on obligation as an explanation for the mixed results in the idiosyncratic deals literature and as an explanation for why idiosyncratic deals may not always generate reciprocity (Liao et al., 2016). Then, in line with activity theory, and in direct opposition to disengagement theory, this research has shown that idiosyncratic deals exert their influence on psychological contract fulfilment through high-quality exchange relationships and not through low-quality exchange relationships. The findings in this research support of the findings of Vidyarthi et al., (2010) who conclude that employers' benefit from developing high quality exchange relationships. And affirm the importance of employment relationship quality to older workers (Armstrong-Stassen, 2008; Bal et al., 2012)

## Practical implications

Whilst Bal et al., (2012) found that idiosyncratic deals play an important role in encouraging older workers to continue working beyond retirement, this research has shown that idiosyncratic deals positively influence psychological contract fulfilment for older workers. This is an important finding as the percentage of older workers in the workforce will increase in the future and as such will become an increasingly important resource for organisations (Wang & Schultz, 2010) and organisations require new tools to motivate their older workers to remain in the workforce (Bal et al., 2012). The literature is silent on the importance of explaining the reason for granting an older worker an idiosyncratic deal. A practical concern is that if an older worker perceives that idiosyncratic deals were granted as a reward that this may increase the level of entitlement and therefore negatively affect outcomes. Conversely, if an older worker perceives the granting of idiosyncratic deals as an inducement for a future return that this may increase the level of obligation and positively influence outcomes. This research has shown that perceptions for the reason an idiosyncratic deal was granted to an older worker has no influence on obligation or entitlement.

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# LEADERS AS CHAMPIONS OF ORGANIZATIONAL TRANSFORMATION

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## ABSTRACT

*The purpose of this paper is to examine the role of leadership in organizational transformation. The paper is developed on existing four seminal theories on leadership in literature: transformational, charismatic, advanced change theory and situational models of leadership. The idea here is that leadership is vital to transform organizations and it is combination of various leadership models that leads to successful transformation of organizations. While charisma or role model of a leader can be regarded as a first step on the basis of which the followers would be intrigued to listen, followed by transformation model, wherein engaged followers will be motivated to take risks and face challenges. Finally, possessing situation a leadership style would enable the leader to behave rationally in adverse situations. Further, the paper discusses the strategies adopted and challenges faced during transformation.*

**Keywords:** Organizational transformation, leadership, transformation, charismatic, situational leadership.

## INTRODUCTION

In the present day dynamic business environment the world is moving swiftly and competition is strong. In order to achieve, compete and sustain in a complex, unpredictable and highly uncertain environment organizations have no choice but to transform them by changing with the times. The organizations that fail to assess, react or adapt to changing environment are doomed to become mediocre or worse, yet, a failure. The decision-making process, which was once simple, has now become complex thus increasing the incessant need to adopt transformational strategies to sustain the competitive advantage. In the transformation process, the key objective for an organization is to employ steps to integrate the systems and processes, to develop an ability to collaborate and coordinate at all levels to enhance its performance and ensure sustainable growth. Thus the role of organizational transformation is imperative towards collectively redesigning, reengineering and redefining the business processes (Scholl, 2005; Wischnevsky & Damanpour, 2006).

## Leadership and Organizational Transformation

Organizational transformation is not only about new ways of conducting business to enhance performance and sustain competitive advantage. It is also about changing the organizational culture to respond and adapt to the changing environment. The organizational transformation has a potential to change the core of the organization and radically change it from 'inside-out'. It requires alignment of leadership and members of the organization at all levels with the new ways of conducting business.

Here, organizational leadership plays a vital role in transformation process. It is the responsibility of the leader to creatively incorporate and introduce innovative transformational ideas to induce better performance and

growth of the company (Gilley, McMillan, & Gilley, 2009). The leader brings an overall transformation within the company considering the company's existing values and ethics.

However, it should be noted that organizations are dependent on bottom line results. Leader also has a critical role in setting the short term and long term goals and corresponding timelines, allocation of the required resources and budgets for achieving desired and sustainable outcomes. Leaders need to monitor and evaluate the real implementation and desired outcome. Adherence to timelines for achievement of milestones and ensuring inclusion and participation of employees at all levels is the key for enabling adoption for successful transformation. Leaders should ensure that both success and failures must be acknowledged collectively ensuring accountability at all levels.

## **LEADERSHIP THEORIES AIDING ORGANIZATIONAL TRANSFORMATION**

### **Transformational Leadership and Organizational Transformation**

James McGregor Burns (1978) coined the terms transformational leadership and transactional leadership, where in transformational leadership focuses on beliefs, needs and values. As has been discussed previously, with changing business environment, transformation of the organization is inevitable, thus transformational leader works with followers to determine the course of transformation and bring about innovation essential for organizational transformation (Simic, 1998). Transformational leaders are visionary, having a sense of strengths and weaknesses of employees (Pless & Maak, 2012). Among the other characteristics of transformational leadership are idealized influence (Hall, Johnson, Wysocki, & Kepner, 2012), and inspirational motivation (Uddin, 2013).

However, influence and motivation are not enough to kindle the interest of the employee. Therefore, it is necessary for the leaders to incorporate *individualized consideration* - that is constant stimulation of the transformation in the minds and the work of the individual so that they consider transformation seriously (Burns & Bass, 2008). Further, *intellectual stimulation* - that is constant stimulation of innovativeness, creativity, permanent reexamination by the leaders to their employees - is also necessary for an effective organizational transformation. This ensures that individuals are able to solve their problems, gain confidence, and in turn ensure effective transformation (Herold, Fedor, Caldwell, & Liu, 2008).

Now that it has been established that transformational leadership ensures effective transformation, it is also important to understand the behavioral aspect of leadership. The next section discusses the role of charismatic leadership in bringing about organizational transformation.

### **Charismatic Leadership and Organizational Transformation**

Several authors have conceptualized about charismatic leadership style, and developmental steps of this style can be traced to 1990s when Dunphy and Stacey (1990) reviewed "charismatic transformation" as a leadership style. As a behavioral theory, it is characterized as patterns of behavior. According to Weber, (1947) charismatic leadership is the characteristic of the leader or charisma that sets a person apart from the crowd. The followers are stimulated and intimidated by the personality of the leaders and imitate them in their life for a better work. Based on certain personal characteristics and approaches of the leaders, the followers tend to attribute extraordinary ability to the leaders. Charisma is the personal trait of the leader that wins over the followers. These behavioral patterns in a leader are stimulated to incorporate the transformation as instructed by the leaders. It can also be indicated as the quality that is developed or mastered by the leaders that attracts the followers while communicating with them. This makes the followers to follow the trait of the leader (Biviano, 2000). For example, if the leader has a strong knowledge base or has good oratory skills, he influences the employees such as seen in the case of Lee Iacocca who developed his charismatic leadership quality by developing oratory skills which influenced the automaker organization Ford and saved them from a potential bankruptcy in 1970 (De Hoogh et al., 2005). The leader kindles the intellectual, emotional and behavioral commitment of the followers that induce them to move forward though the radical transformational phase as instructed by the leaders. An excitement is created where personal character is the driver of the change (Judge,

Woolf, Hurst, & Livingston, 2006). However, the effect of charisma totally depends on the perspective of the followers and varies from one individual to the other. Also, it may not influence the follower in the long term and therefore, charismatic leadership is not treated sufficient for a leader to function properly in the case of organizational transformation (Conger et al., 2000).

## **Situational Leadership and Organizational Transformation**

Adding to above discussion on charismatic leadership or advanced change theory, it should be noted that a leader may fail to make proper decisions due to the lack of his ability to analyze the situation, and this may lead to low performance of the company (Graeff, 1997). The situational leadership model as developed by Dr. Paul Hersey and Paul Blanchard (1969) states that instead of using single style of leadership, a successful leader must indulge in practicing leadership based on the people or follower they are dealing with. Situational leadership also provides a model comprising of integrated knowledge of leadership that initiates the individuals about the task they are responsible for, along with presentation of the concerns they might encounter depending on the particular situation that might demand change as per the conditions (McCleskey, 2014).

## **Strategies for Organizational Transformation**

To ensure organizational transformation, the leaders are required to be strategic in implementation of the transformation so that the neither the employees resist the process, nor the performance of the organization is compromised (Viljoen & Klopper, 2001). Leadership strategies that lead to a planned change can be explained in three ways as suggested by Chin and Benne (1961) – rational-empirical (change is perceived to be logically justified by change recipients), normative-re educative (change recipient themselves participate in developing and implementing the change) and power-coercive (power and position are used to implement change on change recipients). The incremental strategy refers to the incorporation of the changes slowly and gradually introducing one change at a time and transforming the organization more systemically in the long term (Roggema, Vermeend, & van den Dobbelsteen, 2012). Usually this strategy involves aligning of individual contributions of team members with other team members and with overall team contributing to overall team work and innovations. Further emphasis on training and development of employees that increases their flexibility to adapt themselves appropriately with the new change with close monitoring is essential for the success of the strategies being implemented (LaForge, Ingram, & Cravens, 2009). Dunphy & Stace (1993) suggest a strategy for organizational transformation based on three dimensions: time frame of change, level of support of organizational culture and degree of discontinuity with environment. Here time frame is the time taken by the management to incorporate the policies of transformation (Eccles & Feltovich, 2008). Along with time, the leaders are required to keep in mind the importance and values that exist within organizational culture. Pearson (2011) maintains that attaining balance with cultural perspectives and corresponding attitudes of the employees help leaders in gaining support of the team members. Hence, it can be said that the firm might lose its support from team members during transformation. Nonetheless, it is necessary to let the team members understand and appreciate the extent of gain they might get from the transformation if they give up their support and decide accordingly (Dixit & Bhowmick, 2010).

Another organizational transformational strategy is dictatorial transformation which is implemented when the organization is out of fit and there is no time for extensive participation and no support from the internal members and employees. In this type of strategy, the leader requires to be directive and force the transformation as radical change is a mandate in the situation for the survival of the company (Farazmand, 2003). Therefore, organizational transformation is the best way to make an organization survive a potential threat though the outcome of the transformational strategies might be not be a success always and is totally uncertain. A good leader not only enhances the business performance by being a catalyst in framing proper management strategy but also impacts the employees individually as well as the team's performance as a whole.

## **Role of Leader in Influencing Individual Member During Transformation**

During the transformation process, the leader needs to enhance the performance skills of individual member of his team and also masters the skill of building relationship and trust among the employees and the organization such that

organizational goals are achieved (Latham, 2013; Hernez-broome & Hughes, 2004). Further, it is imperative of a leader to motivate and encourage individuals in order to ensure organizational commitment which in turn aids the transformation process. One of the way to inspire an individual to work is the balance between the work and life as the individual works to have a meaningful life (Pless & Maak, 2012). However, employee resistance to change is a grave issue in the process. But if the management fails to include employees in the process of organizational change then it can be very unpleasant and bring about negative outcomes for the organization. Resistance towards change usually results from partial or totally incorrect understanding of the aspects of change management by the employees.

## **Role of Leaders in Influencing Teams during Transformation**

A number of studies have been conducted in the past to determine the role of leadership on teams. Leaders perform several functions, like promotion of learning and adaption to transformation, management of events within teams, management of team boundaries, and how leadership roles are shared within an team to aid the transformation process (Carson, Tesluk, & Marrone, 2007; Chen, Kirkman, Kanfer, Allen, & Rosen, 2007; Druskat & Wheeler, 2003; Eisenbeiss, Knippenberg, & Boerner, 2008; Morgeson & DeRue, 2006; Morgeson, 2005; Schaubroeck, Lam, & Cha, 2007; Wageman, 2001). Leadership role within an organization is the inter linkage between the team and the higher management of the organization and the leader requires to maintain trust and communication so that the employees are well connected and aware of the need for transformation in the organization (Zaccaro, Rittman, & Marks, 2001). Here, lies the importance of feedback within to regulate the mechanisms that are essential to control and direct the individuals and teams to perform as per expectations. Likewise, feedback is essential for maintenance, functioning and development of teams within organization (Bandura, n.d.; Katz & Kahn, 1978).

## **Overcoming Challenges to Organizational Transformation**

Though the strategies are framed by the managers and the leaders, they might face some challenges in the path of success of the organizational transformation for different situations in the work place. According to Kotter (2002), the successful large scale change is a complex process that can be described in eight stages. The stages are: Increase Urgency, Build the Guiding Team, Get the Vision Right, Communicate for Buy-In, Empower Action, Create Short Term Wins, Don't Let Up and Make Change Stick.

## **CONCLUSION**

The present global business scenario is intensely competitive, which constantly drives the contemporary organizations to change existing business processes and become better and more streamlined. Since, organizational environment is complex in nature therefore in such a scenario, enabling sustainable organizational change is a challenging task. This paper is an attempted to understand how leaders can play a vital role in accomplishing organizational transformation. The paper provides an insight of various existing leadership models in the context of transformation and it has been pointed out that combination of various leadership models leads to successful transformation of organizations. While charisma or role model of a leader can be regarded as a first step on the basis of which the followers would be intrigued to listen, followed by transformation model, wherein engaged followers will be motivated to take risks and face challenges. Finally, possessing situation a leadership style would enable the leader to behave rationally in adverse situations. However, in spite of using various leadership styles and developing strategies for enabling complete reorganization and revamping of the existing business processes, the attempt often gets throttled due to employee resistance.

In extreme cases, the management often adopts policies such as the change in leadership along with organizational transformation which is often not accepted with open arms by the employees as they might not be comfortable with their new team leader to work on a fresh idea and radically changed environment. The new leaders fail to understand the psychology of the existing employees and therefore their strategy of transformation are not readily accepted by the employees. Even if there is change in leadership or governance of the organization it requires to be made clear to the employees about it and they are to be provided with a clear idea and purpose of the change (Fountain, 2007). This is particularly important if the transformation involves certain alterations in the organizational policies and culture as the employee are required to be aware of the changes not only for the company's better

performance but also for a voluntary participation of the employees (Naghbi & Baban, 2011). It can also be overcome by arranging a proper communication mechanism with the employees so that they can understand the objectives and aims of the employers as well as can anticipate the gain that they might incur from the transformation. Considering the leaders decision for the change, the leaders are required to adopt the most suitable strategy depending on the situation and the skills of the employees to have a successful transformation. Often the leaders fail to do so for they face hindrance of time, skill and have to face a peer pressure from the higher authorities to incorporate the transformation (Schwarz & Huber, 2008). A consistent transformation procedure is required to be adopted so that it does not confuse the employees and they can feel secure to go through the transformation. Moreover, an agenda is to be maintained by the leaders based on the cultural values of the company to meet the requirements (Rossi-lamastra, 2012). Hence, organizational transformation is not an easy task for the leaders and it requires extreme efforts and skill on their part to make it a success story.

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# AN EMBATTLED RELATIONSHIP? AFRICA AND THE INTERNATIONAL CRIMINAL COURT JUSTICE DEFERRED OR DENIED?

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## ABSTRACT

*Established in 2002, the ICC is a permanent court to try individuals who commit the world's most serious crimes: genocide, war crimes and crimes against humanity. The ICC is a court of last resort and not a court of first instance. Several African states and the African union have criticized the indictments citing that the Court seems to be overly concentrating its efforts on the African continent. Factors such as the limitations imposed on the Court's jurisdiction and the lack of domestic or regional alternatives for prosecuting crimes against humanity. This article traced the origin of African dissent against the ICC and examined its implications on justice for victims, international law, as well as the future of the Court.*

**Keywords:** Accountability, ICC, crimes against humanity and justice.

## CONTEXTUALISING THE INTERNATIONAL CRIMINAL COURT

On 17 July 1998, one hundred and twenty states adopted the Rome Statute, which established the International Criminal Court (Roman Statute of the International Criminal Court, 1998). One-third are from the African nations, and the continent's delegates and representatives have historically played an important role both in drafting the statute and developing the judicial institution. The ICC is the first permanent international criminal court whose main aim is to ensure accountability for perpetrators of the most serious crimes of international concern. The Court is participating in a global fight to end impunity, and through international criminal justice it aims to hold those responsible accountable for their crimes and to help prevent them from happening again. Detailed consideration is given to the history of war crime trials and their place in the system of international law, the legal and political significance of a permanent ICC, the legality and legitimacy of war crime trials, the tensions and conflicts involved in negotiating the ICC Statute, the general principles of legality, the scope of defences, evidential dilemmas, the perspective of victims, the nature and scope of the offences within the ICC's jurisdiction – aggression, genocide, war crimes, crimes against humanity, questions of admissibility and theories of jurisdiction, the principle of complementarity, national implementation of the Statute in a range of jurisdictions, and national and international responses to the ICC. The creation of the Court was primarily embraced in Africa because most states had and continue to experience atrocious crimes; for example, the Rwandan genocides of 1994, which resulted in almost one million deaths (Eltringham, 2004). It was inevitable that forty-seven states participated in the drafting process of the Roman Statute, and the majority approved its adoption (Murithi, 2013). The ICC will only exercise jurisdiction where a state is unable or unwilling to genuinely investigate and prosecute persons accused of committing such crimes. This paper blends detailed legal analysis with practical and policy perspectives and offers an authoritative complement to the extensive commentaries on the ICC Statute. The method that will be used is legislation, reviews of articles and analysis of international law instruments and reports on the ICC.

In this article the role of the ICC will be analysed in creating accountability for atrocities in Africa. The ICC is a very important avenue for ensuring accountability and justice for serious crimes in Africa. The method that will be used is legislation, reviews of articles and analysis of international law instruments and reports on the ICC.

## **IS THE INTERNATIONAL CRIMINAL COURT TARGETING AFRICA INAPPROPRIATELY?**

In the first ten years of the ICC, all investigations and prosecutions have been concerned with situations in Africa. Since its establishment in 2002, the International Criminal Court has heard 22 cases and designated 36 individuals, all of them from Africa (Kariuki, A, 2015). Most of the investigations relate to situations in Africa, namely, the Democratic Republic of Congo, Uganda, the Central African Republic, Darfur/Sudan, Kenya, Libya, Ivory Coast and Mali (ICC Forum, March 2013-January 2014).

Instead of asking whether Africa's targeting is unfair or justified, we need to ask: "Why Africa?" One reason may be that the Office of the Prosecutor has only opened investigations in Africa, and many situations of concern simply do not fall within the ICC jurisdiction.

There may be a good reason for this. It could be that many situations of concern do not fall within the International Criminal Court's jurisdiction (ICC Forum, March 2013-January 2014). The mandate as set out in the Rome Statute only allow crimes committed after July 2002 and its subject matter jurisdiction is limited to war crimes, crimes against humanity and genocide. The International Criminal Court is only a court of last resort for countries that are either unable or unwilling to try suspects themselves. Jean Ping, the former AU Commissioner, told the media that African countries are against Ocampo who is rendering justice with double standards (Lough, 2011), and believes that the ICC is designed to target Africa. He summed it up in his recent exclamation: Why not Myanmar? Why not Iraq?" (Kariuki M, March 12, 2015). Ping's question has an answer: Myanmar is not part of the ICC, and the Court is indeed targeting countries like Iraq. Iraq is not part to the Rome Statute and the Court is in the process of conducting a preliminary examination to determine whether there is a reasonable basis for it to proceed further with its investigation.

## **THE ICC'S OUTREACH AND COLLABORATION IN AFRICA: THE NEED FOR COOPERATION**

There is a two-way communication between the ICC and the situation countries which are subject to the ICC's investigations and proceedings. Article 86 of the Rome Statute obliges Parties to cooperate with the ICC in its investigations and prosecution of cases.

Omar al-Bashir is the current President of the Republic of North Sudan since its independence in 2011. The Sudanese government has declined to surrender its nationals, including its president, Al-Bashir, whose arrest warrants are pending. He has continued to bluntly defy summons to appear before the ICC or answer the charges against him (UNSC Res, 1593). Al-Bashir's latest act of defiance was his travel to Rwanda in March 2018 to attend the African Union Summit despite a warrant out of his arrest by the ICC (AfricaNews, 2018).

The ICC has repeatedly requested for cooperation from African member states to arrest al-Bashir should he travel out of Sudan to a country which is signatory to the Rome Statute. African leaders have repeatedly scoffed at the ICC's directives to arrest the Sudanese leader; for instance, in March 2018 at the AU Trade Summit, Rwanda joins a long list of African countries that have defied the request of the ICC to arrest and hand the infamous president over to the court for prosecution (AfricaNews, 2018). Most cases were about the Court's failures in handling the case, accusing it of basing its evidence on hearsay rather than conducting a serious investigation (Kariuki, A; 2015).

Kenya has paid lip service to cooperation with the ICC to avoid it from prosecuting its citizens. It has nevertheless established an ICC field office in Kenya to assist in the investigation of cases currently before the Court. In the absence of an international police force willing to arrest alleged perpetrators, the ICC continues to rely on the goodwill of its state parties and other inter-governmental organisations to function effectively.

# PROSECUTION OF AFRICAN LEADERS IN THE ICC

There is the sense that the ICC is being utilised in a politically motivated fashion to pursue opponents of governments (Murithi, T and Ngari, A: 2011). Although the parties may not agree on the process, the outcome is owned by all the parties, which allows them the confidence to return to the table for further and better outcomes. Justice cannot be achieved without the aggrieved having the right to be heard. The ICC will only exercise jurisdiction where a state is unable or unwilling to genuinely investigate and prosecute persons accused of committing such crimes. It is therefore important to briefly examine some of the most contentious indictments of African leaders by the ICC.

## Kenya

President Uhuru Kenyatta of Kenya became the first sitting Head of State to be subjected to the jurisdiction of the ICC on charges of crimes against humanity, which he strongly denied (Bowcott, 2014). He was indicated on five counts of his alleged role in unleashing a wave of post-election violence during 2007-2008 that left 1 200 people dead and 600 000 displaced (The Prosecutor v Uhuru, 2015). Kenyatta handed over his power to his deputy, William Ruto before flying to The Hague in Holland (Bowcott, 2014). The President invoked Article 147(3) of the Constitution of Kenya, which provides that in cases where the President is absent or temporarily incapacitated, and in cases where the President so decides, the Deputy President shall act as President. The President will then be able to answer to the charges against him in his personal capacity and not as the Head of State. To highlight how seriously the President wanted the transfer of power to be understood, after announcing his intention in Parliament, he went to Harambee House where he signed the relevant papers and symbolically handed Ruto his symbols of power, signified largely by the presidential motorcade (Mosoku, 2014). Kenya's President, Uhuru Kenyatta has become the first sitting head of state to appear before the International Criminal Court in The Hague faced with charges of crimes against humanity over his role in the violence that followed the 2007 elections in Kenya. However, he says the charges against him are politically motivated and insists that the case should be thrown out (Holligan, 2014).

The case against President Kenyatta was postponed several times while the prosecutor attempted to build the case against him (Deutsche Welle, 2016). Despite the case against Kenyatta being dropped, the court's statement highlighted "the relevance of the materials sought... to current or future investigations." It also warned that any similar lack of cooperation could have a "serious impact on the functioning of the court in future proceedings." Under ICC rules founded by the Rome Statute, which 124 countries have signed up to, all states are required to cooperate fully with ICC investigations and prosecutions (Deutsche Welle, 2016). President Kenyatta's case is significant in that it showed a level of willingness of an African leader to cooperate with the ICC regardless of the allegations of non-cooperation. On several occasions, Kenyatta showed his displeasure and accused the ICC court of biasness towards African States.

## Sudan

On 16 October 1993, al-Bashir appointed himself "President" and disbanded the Revolutionary Command Council. The executive and legislative powers of the council were taken by al-Bashir. Sudan's President Omar Hassan al-Bashir did not appear before the ICC after several summons. Al-Bashir's latest act of defiance was his travel to Rwanda in March 2018 to attend the African Union Trade Summit despite a warrant out for his arrest by the ICC (AfricaNews, 2018). The warrant details ten charges, which include five counts of crimes against humanity, two counts of war crimes and three counts of genocide (The Prosecutor v Omar Hassan Ahmad al-Bashir, 2010).

The ICC did not receive any cooperation from several African states, even South Africa. The ICC found South Africa had failed in its duty to arrest Sudanese President Omar al-Bashir when he was in the country (News 24, 2017) attending an African Union summit in Johannesburg in June 2015. By failing to arrest al-Bashir, the court's ruling stated that South Africa had failed to honour its obligations under international law. For the failure to arrest al-Bashir in March 2018 at the AU Trade Summit, Rwanda joins a long list of African countries that have defied the request of the ICC to arrest and hand over to the Court for prosecutions (AfricaNews, 2018).

Africa's defiance against presidential-Bashir's arrest warrant begun in July 2009 at the thirteenth AU Heads of State summit in Libya where African leaders made a commitment not to arrest and extradite President al-Bashir of Sudan to the ICC whenever he travelled to their territories (Abdulai, 2010). The disproportionality lamented by African leaders is primarily driven by limitations on the ICC's jurisdiction and the lack of alternative judicial pathways in Africa (Kariuki, 2015). Al-Bashir has visited several African states with the confidence that he would not be arrested. This confidence arose by the assurance that most African leaders share in the sentiment that the Court has ceased to be an independent and impartial forum.

Chad and Uganda hosted al-Bashir in May and July 2016 even after being referred to the Council. Al-Bashir also visited Russia, which is not a party to the ICC. Al-Bashir was indicated on three counts of genocide, meaning that he intended to destroy in part the Fur, Masalit and Zaghawa ethnic groups. He has survived longer than any other post-colonial Sudanese head of state.

On 29 March 2017 the Kingdom of Jordan also declined to arrest al-Bashir when he visited the State for the twenty-eight Arab League Summit Meeting in Amman.

## **Libya**

Libya is not a state party to the Rome Statute, although the United Nations Security Council referred the situation in Libya to the ICC to investigate alleged crimes against humanity following the outbreak of popular demonstrations against the regime of M Gaddafi in February 2011. The UN Security Council has also failed to provide the necessary support for the ICC investigation. Civil society continues to call for accountability for widespread crimes afflicting the country, including those through Rome Statute ratification and implementation.

## **Uganda**

The Republic of Uganda signed the Rome Statute in 1999 and later in 2002 deposited its instrument ratifying the treaty. This signing and ratifying of the Rome Statute demonstrated Uganda's commitment and submission to the authority of the Court, and the obligations imposed by the Rome Statute. Uganda has a campaign of resistance fought by the Acholi-dominated Uganda People's Democratic Army (UPDA), the Allied Democratic Forces (ADF) and the Lord's Resistance Army (LRA) (Doom and Vlassenroot, 1999). The Ugandan government referred the situation to the Court in 2003 by a letter from President Yoweri Museveni to the prosecutor of the ICC, Luis Moreno Ocampo. The question to ask then is why would these very states compromise their commitments in defence of their peers who are accused of committing these crimes?

President Museveni also joined the regiment of African leaders opposing the authority of the ICC in African states (Hanson, 2008). The Court has four outstanding arrest warrants for top-level members of the Lord's Resistance Army including their leader Joseph Kony. The ICC does not have the power to arrest these four persons: such arrests are the responsibility of state parties. Museveni's biggest defiance against the ICC was perhaps during his own inauguration in May 2016, which was also attended by Sudanese President al-Bashir who is still wanted by the Court (The Prosecutor v Omar Hassan Ahmad Al Bashir, 2010). The Ugandan President referred to the ICC as a bunch of useless people who had lost his support completely (Associated Press).

## **Democratic Republic of the Congo**

In March 2006 Thomas Lubanga Dyilo was surrendered to the Court by the Congolese government after a February warrant for his arrest. His trial was set to begin in June 2008 but has been delayed because ICC judges determined the prosecution had withheld evidence from the defence. The sheer horror of the conflict in Congo may not be enough to trigger international prosecutions by the ICC. There is a decidedly idealistic tone that both underpins and animates the movement for international justice. Unfortunately, the reality is pocked with competing interests and constituencies. In determining its potential role in the conflict in the Democratic Republic of Congo, the Office of the Prosecutor of the ICC must consider the stability of the country's government, the future of its national justice system, the ramifications of unequal justice for victims of the entire war, the feasibility of successful prosecutions, whether or not

Ituri is the appropriate conflict with which the Court should begin its institutional life, and so on. It is impossible for the ICC to avoid these difficult questions.

## **WHAT IS THE US POSITION ON THE ICC?**

Initially the US opposed the ICC out of fear because it thought it would be used for politically motivated prosecutions of US personnel abroad, but of late it is softening its stance on the Court. When the Security Council voted to refer the issue of Dafur to the ICC in March 2005, the United States abstained rather than vetoing the referral.

The US position is still ambivalent, but this does not mean that the United States has turned the corner to seek out ways to cooperate with the Court. US legislations continue to penalise countries that are signatories to the Rome Statute.

The United States government has consistently opposed an international court that could hold US military and political leaders to a uniform global standard of justice. The Clinton administration participated actively in negotiations towards the International Criminal Court treaty, seeking Security Council screening of cases. The Bush administration, coming into office in 2001 as the Court neared implementation, adopted an extremely active opposition. Washington began to negotiate bilateral agreements with other countries, insuring immunity of US nationals from prosecution by the Court. As leverage, Washington threatened termination of economic aid, withdrawal of military assistance, and other painful measures. The Obama administration has so far made greater efforts to engage with the Court. It is participating with the Court's governing bodies and providing support for the its ongoing prosecutions. Washington, however, has no intention to join the ICC, due to its concern about possible charges against US nationals. The Trump administration takes a tough stance against The International Criminal Court (Eyewitness news, 2018). The US will not cooperate with the ICC and will not provide any assistance to the ICC. The Trump administration even threatened tough action against the International Criminal Court should it try to prosecute Americans for alleged war crimes in Afghanistan (Word News, September 2018).

## **AFRICAN UNION TO WITHDRAW FROM ICC**

Africa has a rocky relationship with the ICC, which plays right into the rhetoric that the Court is targeting Africans and is being used as a tool for the enforcement of neo-colonialism by Western powers (Kasande et al., 2017). Several African leaders feel that the Court abused its powers by pushing self-serving agendas like unconstitutional regime change (Hatcher, 2013). Nine African leaders have been charged in the ICC for various crimes.

Several African leaders have argued that the ICC has digressed from its original mandate of ensuring accountability and justice for the most serious crimes under international law, to a political tool used by the West to promote a neo-colonial agenda (Kasande, et al., 2017). The AU has also accused the Court of breaking international law, saying that by investigating sitting heads of African states it has failed to respect political figures' guarantees of immunity from prosecution. The international immunity laws stem from an understanding that while in office, state officials fulfil critical executives' duties and that undergoing prosecution for criminal offenses could hinder their performance (Kariuki, 2015). Many of the African cases investigated by the ICC were referred to the Court by the governments of these countries themselves. The procedures of the ICC require that justice be a two-way street: when the international community or even a country's own government asks for international aid in bringing justice, the ICC has a heavy responsibility to take action. The ICC has invoked its own jurisdiction in only one situation. Other situations have all come to the Court through referrals from the states concerned and the Security Council. Moreover, the ICC has declined to investigate only two situations outside of Africa. This small number of decisions provide an insufficient basis to conclude that the ICC is discriminating in its selection practices.

## **SOUTH AFRICA'S FAILED WITHDRAWAL FROM ICC**

South Africa's fall out with the ICC came in June 2015 when the Sudanese President Omar al-Bashir who is wanted by the Court on charges of crimes against humanity attended an African union summit meeting in Johannesburg (Mills, 2012).



Upon his arrival in South Africa, the South African Litigation Centre instituted proceedings in the High Court Gauteng Division seeking an order preventing Bashir's exit and effecting of his warrant of arrest (*Southern Africa Litigation Centre v Minister of Justice*, 2015). The High Court ordered that President al-Bashir was prohibited from exiting South Africa pending its final decision. Immediately after pronouncing its order, the High Court was informed by government counsel that al-Bashir had left the country earlier that day. President Jacob Zuma justified his government's action stating that the arrest of al-Bashir was tantamount to illegitimate regime change in Sudan (Tladi, 2015). Notwithstanding this consideration, the ICC ruled that South Africa had failed in its duty to arrest al-Bashir and extradite him to The Hague for prosecution. South Africa did not face any sanction for failing to arrest the Sudanese President, and expressed its intention to withdraw from the ICC (Fabricius, 2017). Moreover, the government followed up its intention by tabling a bill in parliament seeking to repeal the Rome Statute of the ICC, which would effectively withdraw from the ICC. South Africa's Minister of Justice and Correctional Services withdrew the bill in accordance with Rule 334. The South African situation is an account of a failed attempt aimed at liberating itself from the authority of the ICC.

## **IS THE ICC TARGETING AFRICA? AFRICA AND THE INTERNATIONAL CRIMINAL COURT - JUSTICE SHOULD PREVAIL**

The disproportionality lamented by African leaders is primarily driven by limitations on the ICC's jurisdiction and the lack of alternative judicial pathways in Africa. The ICC focus on Africa is neither legally nor morally inappropriate but nonetheless threatens to undermine perceptions of the Court's fairness.

In assessing the work of the ICC, one must devise a benchmark against which to measure it. It is unclear what standard should be used as the ICC is a *sui generis* institution that had to be built from the ground up within the context of ongoing conflicts that demand immediate attention while sharing some similarities to the practices and staff representing divergent legal philosophies, traditions and practices.

The bottom-line is that the world's tolerance for totalitarian regimes is wearing thin. A leader who attempts to govern his nation on autocratic terms automatically becomes unpopular within his own country and the international community at large. Human rights embrace the principles of democracy, constitutionalism, separation of powers and rule of law, which all seek to eliminate the likelihood of the abuse of power. International crimes are mostly perpetrated by powerful and seemingly untouchable state officials who are not normally prosecuted for their roles in such atrocities (Akande and Shah, 2010). Failure to ensure accountability for such violations leads to a detestable cycle of impunity.

Critics accused the ICC of acting immorally by discriminating against Africa and Africans in deciding which situations to investigate and prosecute. The evidentiary basis for such claims is weak. The ICC has invoked its own jurisdiction in only one situation. The other situations have all come to the Court for referrals from the states concerned and the Security Council. The ICC has declined to investigate only two situations outside Africa.

## **CONCLUSION**

African leaders therefore have an obligation to ensure that any person who perpetrates international crimes, head of state or not, must be held accountable for those atrocities. Africans deserve justice and in cases where a state fails to prosecute a perpetrator of international crimes, the ICC offers a forum under which such proceedings may be conducted.

The role of the ICC is to create accountability for atrocities in Africa. This is essentially a legal claim. The ICC fail to respect international law governing head of state immunity, which they claim prohibits prosecution of head of state, even for international crimes. They assert that the ICC is not respecting the principle of complementarity which prohibits the Court from investigating or prosecuting cases when a state with jurisdiction is doing so in good faith.

The strongest argument that the ICC exclusively focuses on Africa is inappropriate and a sociological one. Substantial evidence suggests that perceptions of the ICC 's fairness have suffered in at least some African audiences because of the focus on Africa. It is unclear whether such perceptions are located primarily at the governmental level or are shared widely among African populations. It concluded that although the ICC has its deficiencies, it remains a very important avenue for ensuring accountability and justice for serious crimes in Africa.

If African leaders harbour grievances with the court's methods of operation or are unsatisfied by the ICC's adequacies, it is incumbent upon them to champion reform on the areas of concern through the appropriate channels. To quit the court altogether does nothing for victims but promotes impunity of perpetrators for international crimes, which is highly desirable. Ultimately, victims of international crimes still need justice, which to this end has been provided by international tribunals such as the ICC, regardless of its shortcomings. Psalm 94:15 reads, "for justice will prevail and all the morally upright will be vindicated" (Bible).

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# SCRUTINISING BARRIERS TO GREEN ENTREPRENEURSHIP IN THE EXPANSION AND APPLICATION OF RENEWABLE ENERGY TECHNOLOGIES: A CASE OF KENYA

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## ABSTRACT

*Investing in renewable energy technologies is a key component of green entrepreneurship that is gaining importance in today's business world. This research aimed to understand potential barriers to the adoption and implementation of green entrepreneurship in Kenya, explore the relationship between the initial costs of starting these businesses and the role of institutional, technological and economic barriers. A Sample of 100 respondents was used to collect data via a semi-structured questionnaire in Nairobi, Kenya. The results showed a substantial relationship between the aim to begin a green enterprise business venture and the cost of sustainable power sources. The results also showed the lack of skilled workforce to manage the green advances and lack of market demand were the most significant barriers to the ability of individuals to embrace these entrepreneurial endeavours. These outcomes suggest that changes in government policies to safeguarding the interests of entrepreneurs in the green energy sector; support and creating markets for these energy technologies.*

**Keywords:** Renewable Energy, Green Entrepreneurship, Kenya

## INTRODUCTION

Globalisation and economic growth have been noted to have an impact on greenhouse gases and climate change. In other words, a green economy is a response to the current natural issues confronting the planet. Thus, economical practices and the utilisation of cleaner innovations has been fortified (Farinelli et al., 2011). One idea that is picking up prominence in economic advancement and the move towards economic sustainability is the green business enterprise. As per Gibbs (2009), green entrepreneurs are viewed at the forefront of progress to a more capitalist framework that can help improve the impacts of environmental change. Sustainable power sources are regarded to be naturally benevolent items. Notwithstanding the potential offered by renewable energy advancements, their deployment is still low because of the high development cost and frail institutional help (Ganda and Ngwakwe, 2014). As such, an enterprise in green items can be viewed as sustainability entrepreneurship since it incorporates those exercises that mainly centre on making definite commitments to a green economy and sustainable advancement. The basic research proposition guiding this research is to understand barriers to the deployment and expansion of renewable energy technologies in Kenya. We undertook this via several themes: (1) To relate the initial costs associated with the green entrepreneurship business to the adoption and implementation of these business ventures, (2) To determine the most significant barriers to the successful application of green entrepreneurship ventures in Kenya, and (3) To examine the extent to which technological barriers affect the adoption of green entrepreneurship in relation to other factors.

The rationale behind the investigation was that there is huge potential in the renewable energy business in the developing world, yet these business ventures have not been thoroughly investigated. Could the low reception of green business enterprise be because of institutional boundaries or there might be other fundamental factors that could clarify the weak execution of these green energy sources? Potential explanations behind the reduced acceptance of environmentally friendly energy advances are not clear as inadequate research has been embraced to address the issues. Similar to other developing nations in sub-Saharan Africa, Kenya faces an undersupply of energy. Hence, undertaking this investigation is critical in presenting a more extensive comprehension of the elements that discourage the generation of clean energy through cutting-edge sustainable power source innovations.

## **LITERATURE REVIEW**

Long (1983) likened entrepreneurship to development, viewing enterprise as the foundation of advancement and economic development. The hidden presumption of this observation is that economic growth comes about because of innovation and entrepreneurial accomplishments, where invention and business enterprise are forerunners of economic development (Galindo and Méndez-Picazo, 2013; Hall et al., 2012). Green entrepreneurship borrows from the assumptions by Long (1983), whereby enterprise may either take on a creative or disruptive domain. The role of green business in advancing and empowering sustainable economic development has been commented on by many writers (Gibbs, 2009).

### **Perceptions of Green Entrepreneurship**

Despite the developed world where green business enterprise and investment has been fully grasped and actualised, the emerging nations and transition economies are as yet lingering behind. While trying to analyse the reception of green entrepreneurship in changing economies, Silajdžić, Kurtagić and Vučijak (2015) found that green business is ineffectively seen and comprehended by different partners in these nations. Reduced government and educational support were also noted. A similar situation was reported in Africa as noted by Pegels (2010) and Abdullahi et al. (2017). Fischer, Lopez and Suh (2011) probed the critical hurdles towards the interest in sustainable power sources in sub-Saharan Africa. The discoveries demonstrated that the sub-Saharan locale encounters energy security issues despite the abundance of natural resources that contains the potential of producing renewable energy. The implementation of green technologies has been shown to be faced with many challenges including high initial costs of investment (Huang, Lo and Lin (2013), poor government support in the form of national strategies (Ganda and Ngwakwe, 2014).

The evolution of green entrepreneurship in the expanse of renewable energy has been moderate in several parts of Africa including Kenya. According to a government report by the Kenya Renewable Energy Association (KEREa), there has been a hindered development in the reception and execution of renewable energy innovations and interests in the nation (KEREa, 2012). Green business ventures in the area of renewable energy have kept on encountering various development outcomes in different parts of the world where expanded or diminished take-up has been noted (REN21, 2017). Off-grid sunlight-based energy (pico sun-oriented and sun-based home frameworks) has risen as the most prominent developing sustainable power source industry (Orlandi, Tyabji and Chase, 2016). The wind energy industry has also grown tremendously with about 55 GW of energy being added to the current world capacity (Global Wind Energy Council, 2016). Wind industry has also continued its rapid growth with companies such as Vesta (Denmark), GE (USA) and Goldwind (China) having strong performances (International Energy Agency, 2016). Small-scale wind turbines are used in water pumping, lighting up rural areas and homes have made them famous (Gsänger and Pitteloud, 2014). Biogas technology has also grown tremendously across the world, with more than 700,000 units installed in developing countries in the last decade. Albeit at a slow pace, biogas ventures in Africa are coming up if large-scale biogas investments by Tropical Power (Naivasha-Kenya) and the New-Horizon, Afrox partnership (Cape Town - South Africa) are anything to go by (REN21, 2017).

### **Status of Green Entrepreneurship Ventures in Africa and Kenya**

In Africa, green entrepreneurship in the area of renewable energy seems to account for the leading green entrepreneurial initiatives and remains essential in the environmental sustainability agenda of the African continent

where sustainable energy is a challenge (International Energy Agency, 2017). There has been the growth of substantial grid linked wind power generation, the biggest of its kind in Africa (Cookson, Kuna and Golla, 2017). The wind resource as a potential energy source and a viable entrepreneurial platform in Kenya are massive. As per a wind resource evaluation that was completed by WinDForce over 73% of the nation encounters wind speeds of around 6 m/s which is a great potential (WinDForce Management Services, 2013). While most wind power generation ventures are via government initiatives, investors and entrepreneurs have now started making forays into this sector. As indicated by Kenya's Energy Regulatory Commission (2012) portal for the renewable energy around 5.1 MW is produced by the already operational Ngong Wind Power venture. The Lake Turkana Wind Power Project (LTWP), with a tremendous 310 MW generation potential is likewise on the pipeline and is relied upon to contribute extraordinarily to the country's energy needs (Cookson, Kuna and Golla, 2017). There is also increased activity in small-scale wind power generation that offers an opportunity for small-time green entrepreneurs (Kamp and Vanheule, 2015). Solar power as a potential green energy source in Africa has been slacking regardless of the active and unwavering insolation resources accessible from the mainland. In Kenya, for instance, the Energy Regulatory Commission (2012) gauges that sun-based radiation present has the capability of producing 4-6 kWh for each square meter. Sun-oriented home systems in are also common in Africa (IRENA, 2016). Off-grid solar systems have also seen a massive influx of many entrepreneurs venturing into this market, for instance the M-Kopa Solar Company (Jackson, 2015; Mulligan, 2016).

Geothermal power has additionally been on the ascent in utilisation in Africa, Kenya and whatever remains of the world. Not at all like other sustainable power sources that depend on variable factors, for example, wind, its resource is very steady with a capacity factor of up to 96% being noted (Lund, 2003). It is assessed that Kenya can produce more than 4000 MW from geothermal power (Kiplagat, Wang and Li, 2011). These actualities are markers to the colossal potential possessed by the nation. The majority of the geothermal energy production is in the Olkaria fields found along the Great Rift Valley under the operation of Kenya Electricity Generation Company (KenGen) and private firm Orpower. Orpower in the Naivasha geothermal fields has a 20-year power purchasing treaty with the nation's power transmission company (Makena, 2014). Recently, there has been an increased investigation of similar resources in different zones in the country that have geothermal potential (Omenda and Simiyu, 2015; Otuki, 2017; Richter, 2017). Biogas innovation also remains a less tapped field. As per Roopnarain and Adeleke (2017), biogas technology has a specific utility capability of around 1.2 million families. With a substantial bit of the African occupants existing in rural regions (Mellor, 2014) and having no access to power, this renewable energy technology has the potential of filling a critical gap. Use of biogas technologies is still less implemented in Africa (Bond and Templeton, 2011; Hivos.org, 2013; Tropical Power, 2018). Many firms are now providing small-scale biogas installations using flexible payment rates to attract clients (Kamadi, 2017).

Provision of clean cooking energy solutions is also a sector that is in its infancy in Kenya and Africa. Over 78% of the African population utilises traditional biomass fuels (International Energy Agency, 2017). Thus, the need for clean energies. In Kenya, various clean energy ventures exist, mainly targeting the rural dwellers in a bid to introduce alternative clean cooking solutions including the "Burn Manufacturing Company" with their energy saving "jikokoa" (Masese, 2014), and "Cookswell stoves" (Kangethe, 2013). The waste management sector is a market that is growing fast as far as green entrepreneurship is concerned (Brahmbhatt, Haddaoui and Page, 2017). In sub-Saharan Africa, a whopping 161% in the rise of waste generated in urban centres is expected. Some green entrepreneurial ventures have successfully made inroads in a bid to reduce the environmental effects associated with waste while making handsome profits. A host of waste ventures is underway in Africa. Some of these initiatives include Wecycle in Nigeria, which recycles plastic litters, Ecopost in Kenya, which makes fencing posts from recycled plastics, Eco match in South Africa, which recycles concrete wastes, and Sintmond Group in Kenya, which recycles incandescent bulbs (infoDev, 2015; Lati, 2014; Smallstarter Africa, 2016).

## METHODOLOGY

The research utilised self-administered surveys. The participants were Nairobi residents, with sampling criteria being proficiency in English and they must have resided in Nairobi for the past five years and be between the ages of 18 to 65 years. Excel and SPSS were used for coding and analysis. ANOVA, regression and correlation tests used to determine whether there was a relationship between technological hindrances and the embracing of green enterprise in the field of renewable energies.

## RESULTS DISCUSSION

In terms of demographics, the sample composition had male/female split of 60.29/ 39.71%. In terms of household income distribution, the majority were earning between Ksh 5,001-10,000, closely followed by Ksh 10,001-20,000 every month. Only a small portion of the participants earned less than Ksh 5,000 every month. In terms of age, most of the respondents were between 35-44 years old, with equal spread of those between 25-34 years old and 45-54 years old. In terms of job, 14.5% were employees, 24.6% were self-employed (included green entrepreneurs), and a large proportion, 59.4% were unemployed. There was one missing data. In terms of ethnicity the mix was African (52.2%), Somali 13%, Asians 27.5%. Whites and others comprised the rest.

Correlation analysis showed a substantial relationship existed between the aim to begin a green enterprise business venture and the cost of sustainable power sources ( $r=0.292$ ,  $p=0.016$ ). However, there was no significant connection between owning the green enterprise business and the cost of the initial investment required ( $r=-0.171$ ,  $p=0.163$ ) and also with the expenses of the green advancements ( $r=0.015$ ,  $p=0.901$ ). There was a negative relationship between having the prospect of beginning a business and capital investment and also having a sustainable power source business. The connection between the thought of opening a business and the cost of renewable advancements was optimistic.

To determine the barriers of developing green entrepreneurship technologies a regression model was generated with owning green business ventures as the dependent variable. The model showed that capital speculation, weak foundation and the existence of cartels had a negative connection with the reliant variable. The rest of the factors positively linked with the dependent variable. Concerning significance, capital investment and cartels in the business were the essential factors in the model. The most noteworthy boundaries to the fruitful reception of green entrepreneurial endeavours are the enormous investment required for beginning the business ( $p=0.003$ ) and the existence of cartels in the industry ( $p=0.000$ ). A prominent discovery of this study is the absence of public support towards the embracing of green entrepreneurship and also the role of the weak framework in the adoption of these organisations. There was a negative correlation between proprietorship of green technology industries and public support for these organisations ( $r= -0.031$ ,  $p=0.006$ ). This observation implies the absence of reliable public backing towards these organisations bargains the inclination and drives to possess these organisations among individuals. The poor infrastructural improvement was likewise a primary consideration that fundamentally influenced the selection of green innovation organisations ( $r= -0.039$ ,  $p=0.005$ ). Ownership for business contrarily corresponded to infrastructure, the presence of cartels and public support. Every one of these connections was critical.

The degree to which technological related boundaries influenced the adoption and execution of green entrepreneurship were additionally inspected using a regression model. The reliant variable was the prospect of beginning a green enterprise business. The relationship between the reliant variable and insufficient capable workforce to deal with the sustainable power source innovations and demand for green advancements was negative while the staying two factors demonstrated positive connections. A meaningful relationship existed between the dependent variable and insufficient skilled labour and additionally demand for green innovations. Based on the regression model, it was apparent that the lack of skilled workforce to manage the green advances was the most significant barrier to the ability of individuals to embrace these entrepreneurial endeavours ( $t=-2.488$ ,  $p=0.016$ ). This limitation was trailed by the high demand for green technologies ( $t=-2.271$ ,  $p=0.027$ ).

A correlation between opportunities for business and ownership of the renewable business showed that the presence of extensive opportunities for the green enterprise reception was not identified with the ownership for these business ventures ( $r=-0.080$ ,  $p=0.514$ ). These outcomes demonstrate that despite the potential for green enterprise in the investigation territory, the business was not all around actualised by the respondents.

A sensitivity analysis was performed to understand the effect of the independent factors on the reliant variables under similar suppositions that were utilised as a part of the primary tests directed. For this situation, the essential investigation concentrated on the usage of a green business enterprise as the reliant variable with other factors as the independent variables. In that capacity, the sensitivity examination included applying the numerous relapse investigation with a stepwise technique to help bar the insignificant independent factors. The poor infrastructural

improvement was disregarded which implies that it is immaterial with regards to the reception and usage of green entrepreneurship.

This observation demonstrates that the other variables effectively influence the dependent variable. It was found that 11.5% of sustainable power source business reception and execution can be described by the poor infrastructural improvement. So also, in light of the model rundown 36.3% of the renewable energy business adoption and application can be elucidated by the independent factors including poor infrastructural improvement. Nonetheless, a similar model outline demonstrates that 33.9% of the renewable energy business embracing and implementation can be explained by the independent factors barring poor infrastructural advancement.

We theorise that the expenses related to establishing a green industry venture assume a part in deciding the determination and execution of these business undertakings among the individuals. The survey discovered vital connections amongst the intent to begin a green business and the cost of reasonable power sources. The way that a noteworthy extent of the respondents is reluctant to begin a business in the green energy sector offers hindrances or factors clarifying why these folks are as yet unwilling to gamble into this business. Along these lines, the researchers are recommending that one of the primary considerations that disclose this hesitancy to start a business in the environmentally friendly energy segment could be the cost related to commencing these organisations. The concern of the cost of the sustainable power sources has been vital to debates on the likelihood of Africa grasping renewable energy solutions (Fischer, Lopez and Suh, 2011). As demonstrated in this investigation, the cost of beginning these organisations, purchasing the renewable energy solutions and entering the segment is high and goes about as a restricting element to the successful adoption of these business ventures among individuals. These suppositions concur with Huang, Lo and Lin (2013) who likewise detailed that the high beginning expenses of sustainable power development constrain the reception of these advancements.

Notwithstanding, the capability of these feasible power advances in taking care of issues confronting African countries cannot be ignored (KERE, 2012). The harsh business start-up expenses of renewable energy businesses exhibited in this investigation have been supported by Pegels (2010) and Hirmer and Cruickshank (2014). Nonetheless, unlike this study that summed up the obstructions to the acceptance of green entrepreneurial endeavours, the examination by Hirmer and Cruickshank (2014) mostly focused on difficulties to the reception of green business undertakings. These hitches incorporate the monopoly of the energy sector by governments, insufficient legislatures, administrative bodies, and financial planning sections to ensure interests in sustainable power source advances (Timilsina, Kurdgelashvili and Narbel, 2012). In any case, every one of these researchers concurs that the cost of beginning these organisations is an issue that restrains its fruitful appropriation.

Identical to the discoveries of this inquiry that the government has to be engaged in the adoption and the application of green business advancements, Aldy (2011) announced that legislatures had assumed a part in minimising enterprise in the green energy division. Indeed, the author contends that substantial help from most governments has been diverted to entrepreneurial ventures in the fossil fuel area. Government focus is around executing endowments for oil, gas, and coal. Nonetheless, this is not the situation for renewable energy innovations. These findings endorse that adjustments in government strategies concerning defending the interests of business people in the environmentally friendly energy segment might be essential in building prolonged backing for these activities. The part of the legislature likewise originates from making markets for these energy advancements. Indeed, most governments around the globe assume a necessary measure in creating the equilibrium in markets for environmentally friendly energy innovations and establishments (Malen and Marcus, 2017). Policy support has also been shown to be crucial in evolving and supporting the acceptance and execution of green business enterprise ventures. Policy backing might be as feed-in-leaves for energy created from sustainable power sources. These schemes may assume an essential share in urging individuals to endeavour into these organisations. Given the sensitivity investigation, it was established that poor infrastructural progress has little effect on the selection and execution of green business. In any case, even though the outcomes from the sensitivity examination indicated poor infrastructural advancement as unimportant, research demonstrates that the absence of or weak infrastructure makes it unfeasible to embrace green entrepreneurship. Additionally calls attention to that green business enterprise is economically unachievable owing to the high operational expenses, particularly transportation and transmission costs due to poor infrastructure. These discoveries are by those of Nguyen et al. (2010) who set forth that "inadequate infrastructure



makes it difficult to develop renewable resources for generating electricity" (p. 8). Mainly, in Kenya, most, if not all sustainable asset locales are found in remote territories, far from cargo centres and are tough to access.

Nguyen et al. (2010) proclaimed infrastructural hurdles as a common hindrance to a more extensive adoption and implementation of green business. Consequently, since the results of the sensitivity investigation demonstrate that poor infrastructural advancement can clarify 11.5% of the renewable energy business acceptance and usage, it can be presumed that poor infrastructural improvement is a vital factor while thinking about the different difficulties to the reception and organisation of sustainable power source advances. The ANOVA analysis outcomes additionally aggravated its significance. The sig. values (p-values) of the different independent factors (barriers to the successful adoption of green entrepreneurship) were all not as much as the expected alpha ( $\alpha$ ) estimation of 0.05. The results signify sig. values of  $p < .001$  for all the independent variables verified through the ANOVA investigation, which demonstrates the outcomes are statistically significant at a 0.05 level. Thus, the independent factors tested affect the adoption and implementation of sustainable power source innovations in Kenya.

For example, it was theorised that the cost of beginning a green enterprise venture makes it unthinkable for people intrigued to embrace and actualise such organisations. Observing the outcomes, the independent variable (huge capital investment needed for the business) had a sig. value of  $p < .001$ , which means statistical importance. Based on the sensitivity analysis, it can be presumed that the huge capital investment required for the business is a crucial blockade to the implementation of green enterprise in Kenya. These outcomes are like those announced in various research studies which report that abnormal amounts of initial capital venture required by green advancements acts as a key hindrance for the application and execution of renewable energy innovation projects in numerous nations (Fischer, Lopez and Suh, 2011; Nasirov, Silva and Agostini, 2015). Those inspired by beginning green enterprise organisations confront the issue of not having the capacity to secure financing to make such undertakings productive. Respondents underscored an absence of generous long-term financial incentives as an important impediment for the development of sustainable power source establishments.

The results segment reveals how the standardised coefficient beta qualities helped check the effect of the independent elements on the dependent factors. For instance, the beta value of poor infrastructural improvement, presence of cartels in the business, the massive capital investment requirement for the industry and government support for the green enterprise are - 0.167, -0.272, -0.311 and -0.257 respectively. This finding implies that as poor infrastructural improvement, the existence of lobbies in the trade, the huge capital investment requirement for the business and government support for green entrepreneurship increases the probability of embracing and executing a sustainable power source business diminishes. Thus, the outcomes acquired from the coefficient table were statistically significant as they show that these independent factors negatively affect the selection of green innovations and organisations. The examinations by Fischer, Lopez and Suh (2011) and Nasirov, Silva and Agostini (2015) likewise discovered comparative results referring to the insufficient framework, tremendous initial capital prerequisite and government policies as deterrents to the expansion and deployment of renewable energy technologies.

## **Potential for Green Entrepreneurship in Kenya**

We hypothesised that there is incredible potential for the implementation of green businesses in renewable innovations in Kenya. Nonetheless, most of the respondents did not agree with the notion that this is a conceivable business in the nation. There was an abnormal state of vulnerability among the respondents on the achievability of this business venture in Kenya. These discoveries are in opposition to the theory established by the researchers. It has been noticed that there is extraordinary potential for green business enterprise, particularly in Africa (Brahmbhatt, Haddaoui and Page, 2017). Green business and green markets are rising in many parts of Africa. However, the different difficulties, for example the cost of the venture and accessibility of these advancements, is constraining the degree to which individuals are grasping the business. Growth into the green entrepreneurship expects individuals to do things differently than is as of now being finished. It will be imperative for entrepreneurs to make risky investments in new and unacquainted territories, procedures and developments. Hence, business people should likewise drive these progressions through their ventures, expansions, and risk-taking (Brahmbhatt, Haddaoui and Page, 2017).

## CONCLUSIONS AND RECOMMENDATIONS

This investigation exposed significant connections between the plan to start a green enterprise business venture and the cost of renewable energy sources. The different elements that may constrain the reception of these advancements incorporate the cost of purchasing the renewable energy technologies, the presence of limited skilled workers accessible for the sustainable power source industry, the absence of access to business financing, poor infrastructural improvement, the existence of cartels in the trade, and the lack of government support. With regard to connection to the particular issues identified with the developments, regular concerns incorporate accessibility of deficient talented staff to deal with these innovations, the absence of market demand for the green technologies and inadequate access to information regarding green advances. Given the findings of this study, it was apparent that the absence of capable workforce to handle the green energy progresses and the deficiency of market demand were the most noteworthy obstructions to the capacity of people to grasp these entrepreneurial undertakings. A significant conclusion from this exploration is the way that there is an excellent perspective for green entrepreneurship in Kenya. However, regardless of whether this potential can be acknowledged or not is subject to the individual business people and also the nation's government's pledge of supporting these business projects. We therefore recommend policy changes at the national level that urges individuals to invest in this renewal businesses to improve the recognition of green enterprise in Kenya. These policies should be supported by further research that demonstrates the significance and capabilities of these businesses to national prosperity.

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# HEURISTICS OR ALGORITHMS? A CONFIGURATIVE PERSPECTIVE ON ADAPTIVE DECISION PROCESS

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## ABSTRACT

*We use the Multi-Armed Bandit models to simulate the behavioral patterns of simple heuristic strategy, complicated algorithms and experience-based heuristic strategy drawing from reinforcement comparison methods. From a configurative perspective, we examine two conditions: environmental predictability and expertise relevance in the simulation experiments. The findings suggest that, under the condition of environmental unpredictability, simple heuristic can have the potential to outperform complicated algorithms. Yet, when the condition of expertise relevance is jointly considered, this factor of prior experience shifts the ranking of the effective decision strategies: while the expert heuristic strategy excels in most of the occasions, such experience-based heuristic strategy could be very problematic if it is rooted in basic or irrelevant prior knowledge. These findings provide insights for a configurative analysis of the effectiveness of heuristics, and inform the design of strategic heuristics from prescriptive analytic perspectives.*

**Keywords:** Heuristics, Algorithms, Decision-making, Simulation, Environmental predictability.

## INTRODUCTION

The use of heuristics as an adaptive mechanism has been considered central in the organizational decision –making and learning process. While heuristics are usually characterized as decision rules and patterns derived from experience, a fundamental question lies in the quality of the decision and a related inquiry concerning the conditions for assessing the effectiveness of heuristics. On the one hand, scholars have suggested that, decision makers' heuristics can be evolved to match their environmental changes in the adaptive process. The effectiveness of heuristics is particularly exemplified under environmental context characterized by uncertainty and unpredictability (Artinger, Petersen, Gigerenzer, & Weibler, 2015; Gerd Gigerenzer, 2008; G. Gigerenzer & Gaissmaier, 2011). On the other hand, scholars have argued that, the role of adaptation in the heuristic mechanism can reduce the sensitivity in discriminating new environmental stimulus. This school of scholars suggested that, while the effectiveness of heuristics is subject to further scrutiny, structured decision models based on more sophisticated algorithms are considered more reliable in such environmental condition (Kahneman, 2003; Tversky & Fox, 2000). As most theoretical and empirical studies have emphasized on investigating the use of heuristics from taking a particular side (either desirable or undesirable), less explored in strategy literature is in assessing the consequences of heuristics under different circumstances. We propose that, different combinations formed of the two conditions – environmental predictability and expertise relevance can be served as a basis of evaluating the effectiveness of heuristics, and that these configurations can inform different sets of limitations and opportunities of using heuristics. We conduct our investigation through an experiment design comparing the performances across different sets of heuristics and algorithms in the simulated decision process. In particular, we use the Multi-Armed Bandit models for the simulation. What differentiates our work from other management studies applying the bandit model lies in that, we focus on using a diverse set of heuristics and algorithms to operationalize the comparison of relative decision behaviors and performances in the simulation experiments. Our findings contribute to the configurative perspective of the effectiveness of heuristics.

## Conditions of Environmental Predictability and Expertise Relevance

The validity of environmental context provides specifiable cues for pattern recognition and effective feedback (Einhorn & Hogarth, 1981; Kahneman & Klein, 2009; Karelaia & Hogarth, 2008). In advancing this condition of environmental validity for the business context of strategic decision making, we choose to use the term *environmental predictability* as the first condition for evaluating the effectiveness of heuristics. Here, environmental predictability is defined as “the level of irregularity of the pattern of changes” (Karelaia & Hogarth, 2008; Mitchell, Shepherd, & Sharfman, 2011; Wholey & Brittain, 1989). Thus, low environmental predictability suggests that, the environment context presents a dispersed range of outcomes in view of ambiguous or obscured cues, which can lead to the difficulties in applying or matching prior environmental models (Courtney, Kirkland, & Viguerie, 1997; Karelaia & Hogarth, 2008; Kurtz & Snowden, 2003; Mitchell et al., 2011). The condition of environmental predictability is crucial in assessing whether the environmental context provides specifiable cues for pattern recognition and effective feedback. In other words, this condition of environmental predictability also serves as basis in evaluating whether decision makers can develop relevant skills and experience in certain environmental context (Kahneman & Klein, 2009; Karelaia & Hogarth, 2008). This assertion links to the discussion of the effect of experience and expertise. Therefore, in addition to examining the condition of the environmental context, we need to consider another condition - decision makers’ ability and capacity to learn – for assessing the effectiveness of heuristics.

Those decision scholars with general skepticism about using heuristics admit the competency of heuristics, under the condition that if these heuristics draw from specific experience (Kahneman & Klein, 2009). While advocating the potential of heuristics in adapting to various environment context, the fact that successful utilization of heuristics depends on decision makers’ core capacity and expertise is further emphasized in the adaptive heuristic perspectives (Artinger et al., 2015; Klein, 2009). Drawing from these views, here we state the second condition for assessing the effective heuristics as “*expertise relevance*”. This condition refers to that, the competency of heuristics can be assessed on the condition that, if these heuristics draw from specific experience : in the process of making strategic decisions, prior to assessing relevant level of information, decision makers tend to make value judgement of the “cues” on basis of their experience acquired in prior context (Karelaia & Hogarth, 2008; Klein, 2009; March, 2010). Thus, this definition emphasizes on examining decision makers’ acquisition of experience in prior decision contexts (Kahneman & Klein, 2009; Karelaia & Hogarth, 2008; Shanteau, 1992).

Different combinations of the two conditions - environmental predictability and expertise relevance - are all possible in the decision context. Generally, there are mix findings with regard to the predictions and prescriptive approaches for different configurations. For example, under the conditions of high environmental predictability and low expertise relevance, some studies have suggested that, flawed heuristics decisions can be highly possible, and that using structured algorithms can lead better performance (Kahneman & Frederick, 2005; Kahneman & Klein, 2009). Yet, some studies shown that, under low environmental predictability, expert decision makers did not necessarily perform better than novice decision makers.

Under the combination of low environmental predictability and high relevance of expertise, some studies suggest that, for decision makers with high relevance of expertise, heuristics are powerful tools in adapting to the environment with low predictability. The condition of irregular patterns of changes does not necessarily hamper the effectiveness of heuristics; rather, this condition may inspire the potential of heuristics that are derived from relevant expertise (Bingham & Eisenhardt, 2011; Klein, 2009). In contrast to this view, other studies point out that, even with high relevance of expertise, decision makers may still suffer from biases when using heuristic (Lovallo, Clarke, & Camerer, 2012; Mitchell et al., 2011). The potential issue of “overconfidence” is more likely to occur in the context of low environmental predictability (Kahneman, 2011). There is the notion of “competence hypothesis”: decision makers prefer to bet more on uncertainty events in which they have areas of expertise or belief in their own competence than on events (with more certainty) in which they feel less knowledgeable or competent (Fox & Tversky, 2000; Heath & Tversky, 1991; Tversky & Fox, 2000).

Further, while the use of computing power and algorithms to establish patterns seems viable under the combination of low environmental predictability and low level of expertise relevance, studies have suggested that simple heuristics may outperform complicated algorithms in certain decision context (Kuleshov & Precup, 2014).

Yet, as the effect of reinforcement learning may adversely influence the effectiveness of the adaptive heuristics (Artinger et al., 2015)(Artinger et al., 2015) , the consequences of using experience-based heuristics derived from learning under uncertain and unpredictable environment can be questioned (March, 2010; Starbuck, 2009).

## Method

To demonstrate the performance comparison of heuristics and algorithms across configurations constructed by the conditions of environmental predictability and expertise relevance, we use the Multi-Armed Bandit models to conduct simulation experiments. Simulation methods can help construct the theoretical logic in an analytical process and inform the pattern and direction for theory development (Davis, Eisenhardt, & Bingham, 2009). The Multi-Armed Bandit problem is well-suited for modelling decision behavior, particularly for simulating discrete choices under condition of uncertainty (Puranam, Stieglitz, Osman, & Pillutla, 2015). While most strategy and organization studies apply the Multi-Armed Bandit model for highlighting the trade-off between exploitation and exploration (Posen & Levinthal, 2012; Stieglitz, Knudsen, & Becker, 2016), here we employ the bandit model with a specific focus on representing and comparing different patterns of decision behavior. The fact that there are many well-developed algorithms for the Multi-Armed Bandit problem facilitates such comparison. Specifically, we use different sets of algorithms to contrast the patterns and performances of simple heuristic strategy with that of complicated mathematics. In our experiments, we assume a stylized business decision environment faced with the decision makers in the organizations: decision makers consider three alternatives (business opportunities) with unknown outcomes. We think that presenting a small number of alternatives for consideration could match some real decision scenarios: it is reasonable to assume that decision makers in general would consider the three most possible options in the business environment. The goal in the Multi-Armed Bandit problem is to maximize the cumulative rewards in the sequential decision problems. In other words, assuming that there is a value for the optimal choice, the goal is to minimize the total regrets of not selecting the optimal alternative. We select four Multi-Armed Bandit algorithms:  $\epsilon$ -Greedy, UCB1, UCB 1 Tuned, and Reinforcement Comparison Method to formulate our analysis (Kuleshov & Precup, 2014; Sutton & Barto, 1998).

### General heuristic strategy - $\epsilon$ -Greedy

We use  $\epsilon$ -Greedy as a representation of general heuristic strategy because this algorithm is simple and straightforward, which is consistent with the principles of “fast-frugal” and “take-the-best” from the perspectives of adaptive heuristics (G. Gigerenzer & Gaissmaier, 2011). Applying the general heuristic strategy of  $\epsilon$ -Greedy, the decision maker selects an alternative that has the highest average reward up to the time that the decision maker has observed. As opposed to the non-exploration behavior in the pure greedy strategy, decision makers using the general heuristic strategy of  $\epsilon$ -Greedy engage in certain amount of “random” exploration (Kuleshov & Precup, 2014) :

$$p_i(t+1) = \begin{cases} 1 - \epsilon + \epsilon/k, & \text{if } i = \arg \max_j \hat{\mu}_j(t) \\ \epsilon/k, & \text{otherwise.} \end{cases}$$

$p_i(t)$  is the probability that a decision maker chooses a particular alternative at action  $t$ ,  $\hat{\mu}_j(t)$  is the observed means at iteration  $t$ ,  $\epsilon$  is the exploration parameter. In this experiment, we use a fixed value of  $\epsilon = 0.05$ . Following the perspectives of adaptive heuristics, we assume that, while decision makers would exploit current experience most of the time, they do engage in a small amount of random exploration in the decision process.

### Complicated mathematical algorithms – Upper Confidence Bounds (UCB) family

We use the UCB family - UCB1 and UCB 1 Tuned to represent the decision behavior based on application of more complicated mathematical calculations. Basically, the UCB algorithms measure the potential of an alternative based on the highest estimate of the possible reward (i.e., the upper confidence bound, UCB) of that option. The UCB is calculated on basis of both mean reward value and the number of action on an alternative. Scholars consider that, the UCB family algorithms may hit the balance between exploring unfamiliar alternatives and exploiting high-reward options, while maintain to reduce errors by “bounding the regret” (Kuleshov & Precup, 2014).



### UCB1-

$$j(t) = \arg \max_i \left( \hat{\mu}_j(t) + \sqrt{\frac{2 \cdot \ln(t)}{n_i}} \right)$$

$j(t)$  is the greediness that the algorithm picks the alternative  $j$  at action  $t$ .  $n_i$  is the number of times that each alternative has been played.

The main differences between UCB1 and UCB1 – Tuned is that, the latter not only measures the average value of each option, but also takes into account the variance of these alternatives.

### UCB1 –Tuned –

$$j(t) = \arg \max_i \left( \hat{\mu}_j(t) + \sqrt{\frac{\ln(t)}{n_i} \min\left(\frac{1}{4}, V_i(n_i)\right)} \right)$$

where

$$V_i(t) = \hat{\sigma}_i^2(t) + \sqrt{\frac{2 \cdot \ln(t)}{n_i(t)}}$$

$\hat{\sigma}_i^2(t)$  is the estimate of the reward variance

### Experience-based heuristic strategy - Reinforcement Comparison Method

In the heuristic strategy of Reinforcement Comparison Method, decision makers hold an initial preference for each alternative, of which the preference is updated according to action experience on that alternative. The probability of selecting an option is based on comparing the observed mean value of the alternative with decision makers' experience on each alternative (the average expected reward of that option). Therefore, as opposed to the simple heuristic of “taking the best” in  $\varepsilon$  –Greedy, the strategy of Reinforcement Comparison Method places more weights on decision makers' subjective belief about the value of each alternative. Thus, Reinforcement Comparison Method implies that, decision behavior is strongly influenced by decision makers' initial preferences and recent experience.

$$p_i(t) = \frac{e^{\pi_i(t)}}{\sum_j e^{\pi_j(t)}}$$

$\pi_i(t)$  is the preference for each alternative  $i$  at action  $t$ ,  $p_i(t)$  is the probability that a decision maker chooses a particular alternative  $i$  at action  $t$ . If alternative  $j(t)$  is selected at action  $t$ , and reward  $r(t)$  is received, the preference  $\pi_{j(t)}$  is updated as:

$$\pi_{j(t)}(t+1) = \pi_{j(t)}(t) + \beta(r(t) - \bar{r}(t))$$

$\bar{r}(t)$  is the average expected reward, at every action, the mean of the rewards is updated as:

$$\bar{r}(t+1) = (1 - \alpha)\bar{r}(t) + \alpha \cdot r(t)$$

Here,  $\alpha$  and  $\beta$  are learning rates. In this experiment, we use fixed values for the learning rates ( $\alpha = 0.4$ ,  $\beta = 0.98$ ) (Kuleshov & Precup, 2014).

## Experiments and Propositions

In Experiment 1, we compare general heuristic strategy ( $\varepsilon$  –Greedy) and complicated mathematical algorithms (UCB1 and UCB1 – Tuned) under the condition of environmental predictability, which is operated as the reward variance of three alternatives. Here, high environmental predictability is operated as  $\sigma = 0.1$  (low reward variance), medium environmental predictability is operated as  $\sigma = 1$  (medium reward variance), and low environmental predictability as  $\sigma = 20$  (high reward variance). The results of Experiment 1 (Figure 1 -6) showed that, under the condition of high environmental predictability ( $\sigma = 0.1$ ), the two complicated algorithms (UCB1 and UCB1 – Tuned) outperformed general heuristic strategy. Yet under medium environmental predictability ( $\sigma = 1$ ), general heuristic strategy ( $\varepsilon$  –Greedy) started to outperform one of the mathematical algorithms – UCB1. Then, when the environmental condition turned

into low predictability ( $\sigma = 20$ ), the performance of general heuristic strategy ( $\epsilon$ -Greedy) has already approximated the performance of the most advanced algorithm – UCB1-Tuned. Therefore, we propose that:

**Proposition 1a:** Under high level of environmental predictability, complicated algorithms outperform simple heuristic strategy.

**Proposition 1b:** As the level of environmental predictability decreases, the chance that simple heuristic strategy outperforms complicated algorithms increases.

**Figures 1 & 2:** Mean regret under  $\sigma = 0.1$  for  $\epsilon$ -Greedy, UCB1 and UCB 1-Tuned

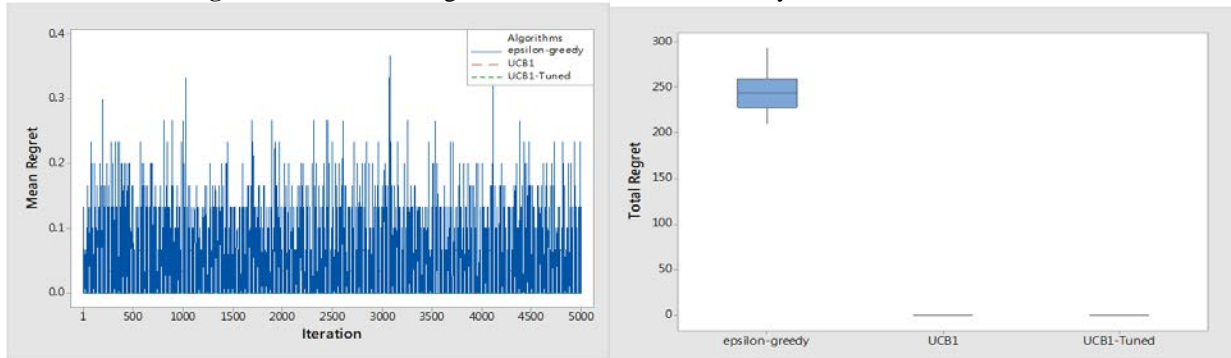


Figure 1. Mean regret under sigma 0.1 for  $\epsilon$ -Greedy, UCB1 and UCB1-Tuned

Figure 2. Boxplot of the total regrets under sigma 0.1 with 5000 simulation runs

**Figures 3 & 4:** Mean regret under  $\sigma = 1$  for  $\epsilon$ -Greedy, UCB1 and UCB 1-Tuned

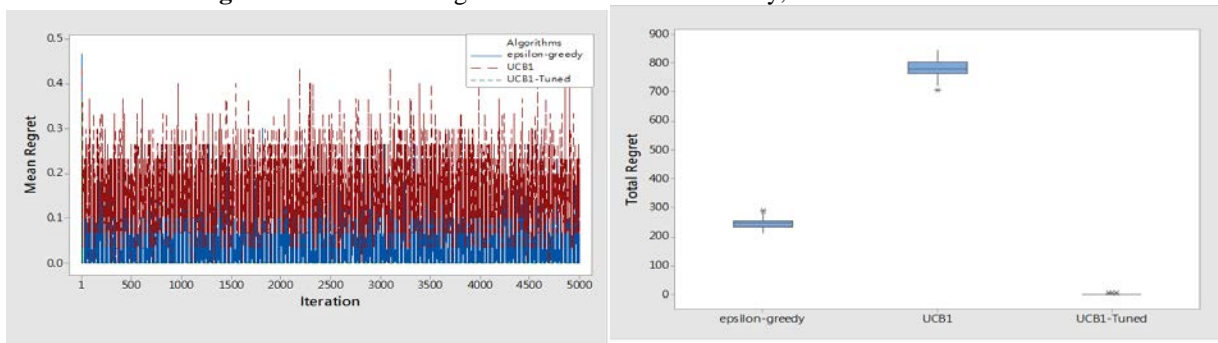


Figure 3. Mean regret under sigma 1 for  $\epsilon$ -Greedy, UCB1 and UCB1-Tuned

Figure 4. Boxplot of the total regret under sigma 1 with 5000 simulation runs

**Figures 5 & 6:** Mean regret under  $\sigma = 20$  for  $\epsilon$ -Greedy, UCB1 and UCB 1-Tuned

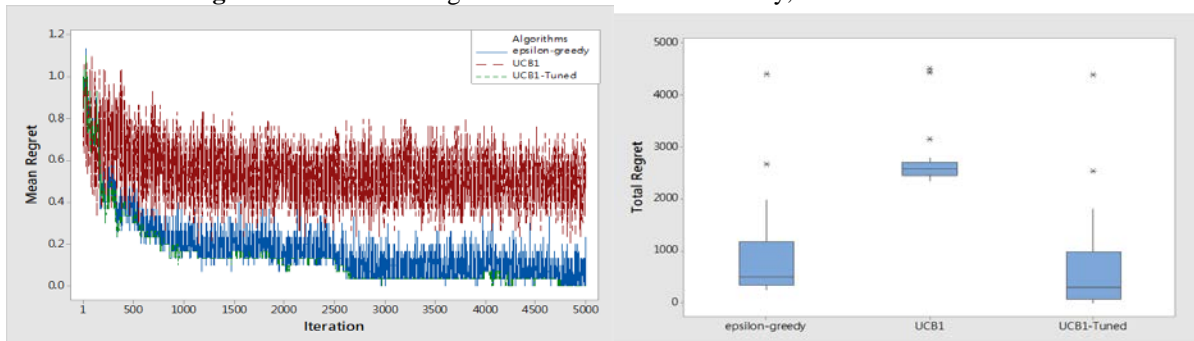


Figure 5. Mean regret under sigma 20 for  $\epsilon$ -Greedy, UCB1 and UCB1-Tuned

Figure 6. Boxplot of the total regret under sigma 20 with 5000 simulation runs

In Experiment 2, in addition to the condition of experimental predictability, we add another condition – expertise relevance, which is operated as prior belief or preference toward the three alternatives. We use Reinforcement Comparison Methods to represent the influence of prior related experience: R1 (prior preference = 1, 10, 100 for the three alternatives) suggests expert (high expertise relevance) with the ability of pattern recognition. R2 (Prior preference = 1, 2, 3 for the three alternatives) represents basic level of prior relevant experience. R3 (equal preference for three alternatives) implies no relevant prior experience. Therefore, in Experiment 2, we compare six bandit models of the three categories of decision strategies including general heuristic strategy ( $\epsilon$  –Greedy), complicated mathematical algorithms (UCB1 and UCB1-Tuned), and Reinforcement Comparison Methods (R1, R2 and R3). The results of Experiment 2 (Figure 7-12) showed that, while the expert experience-based strategy (Reinforcement Comparison Method R1) generally performed very well, particularly under high and medium level of environmental predictability, the other two experience- based strategies (R2 and R3, representing basic and no relevant expertise respectively) did not. In particular, under medium and low environmental predictability, it appeared that general heuristic strategy ( $\epsilon$  –Greedy) is a much better model than R2 and R3. Therefore, we propose that:

**Proposition 2a:** Under high and medium level of environmental predictability, experience-based heuristic strategy that is backed by relevant expertise outperforms both general heuristic and complicated algorithmic strategy

**Proposition 2b:** As the level of environmental predictability decreases, the chance that general heuristic strategy outperforms experience-based heuristic strategies increases.

**Figures 7 & 8:** Mean regret under  $\sigma = 0.1$  for  $\epsilon$  –Greedy, UCB family and Reinforcement family (R1, R2, R3)

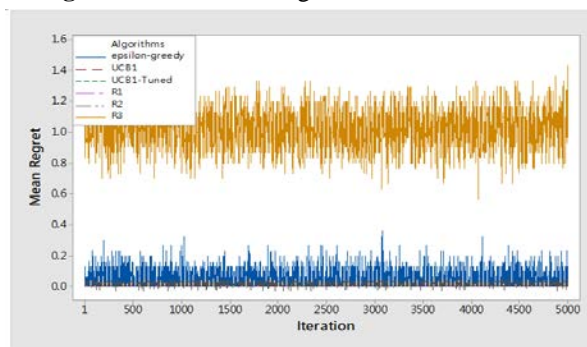


Figure 7. Mean regret under sigma 0.1 for  $\epsilon$  –Greedy, UCB1, UCB1-Tuned and three reinforcement methods (R1, R2, R3)

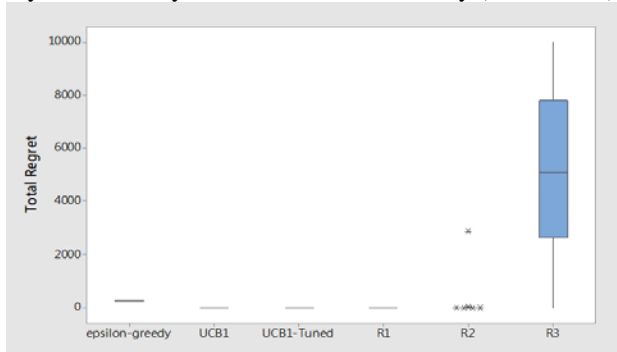


Figure 8. Boxplot of the total regret under sigma 0.1 with 5000 simulation runs

**Figures 8 & 9:** Mean regret under  $\sigma = 1$  for  $\epsilon$  –Greedy, UCB family and Reinforcement family (R1, R2, R3)

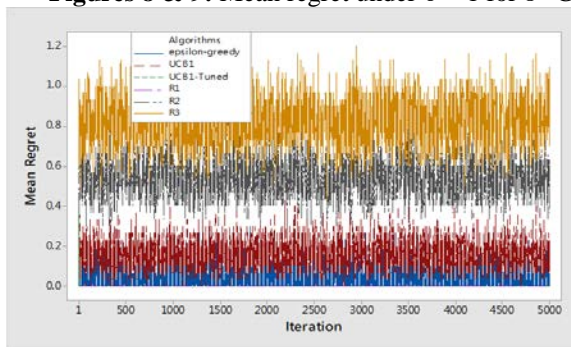


Figure 9. Mean regret under sigma 1 for  $\epsilon$  –Greedy, UCB1, UCB1-Tuned and three reinforcement methods (R1, R2, R3)

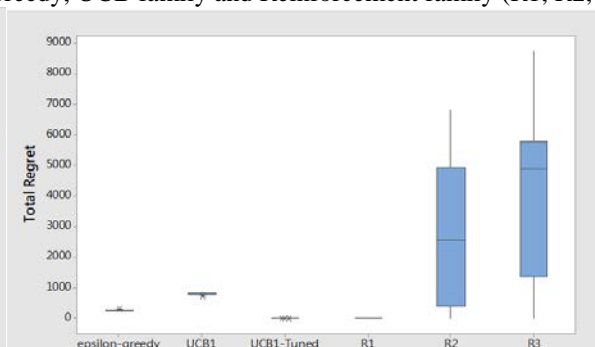


Figure 10. Boxplot of the total regret under sigma 1 with 5000 simulation runs

**Figures 8 & 9:** Mean regret under  $\sigma = 20$  for  $\epsilon$ -Greedy, UCB family and Reinforcement family (R1, R2, R3)

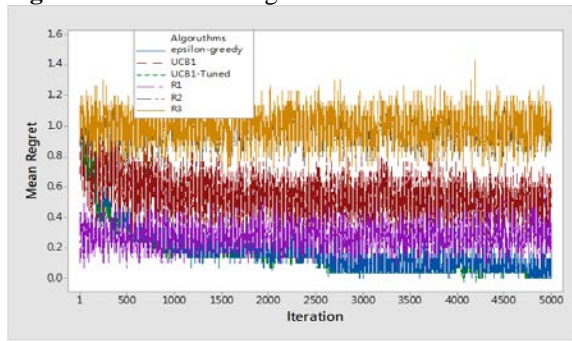


Figure 11. Mean regret under sigma 20 for  $\epsilon$ -Greedy, UCB1, UCB1-Tuned and three reinforcement methods (R1, R2, R3)

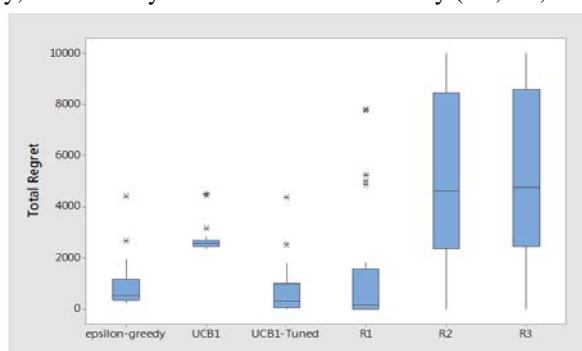


Figure 12. Boxplot of the total regret under sigma 20 with 5000 simulation runs

## Discussions, Limitations and Future Research

In this research, we use the Multi-Armed Bandit model to simulate the behavioral patterns of simple heuristic strategy, complicated algorithms and experience-based heuristic strategy rooted in reinforcement comparison methods. While the two conditions –environmental predictability and expertise relevance did influence the relative performances of different decision strategies, more nuanced findings were derived from the simulation experiments. Regarding the relationship between environmental predictability and the performance of general heuristic strategy, the findings suggest that, under uncertain and unpredictable environmental context, simple heuristic rules can have the potential to outcompete the performances of complicated design algorithms. Yet, when the second condition of expertise relevance is jointly considered, the findings showed that, this factor of prior experience shifts the ranking order of the effective decision strategies: while the expert heuristic strategy excels in most of the occasions, such a method could be very problematic if this experience-based strategy is rooted in basic or irrelevant prior belief. These findings implied that, under the behavioral pattern of reinforcement learning, the initial subjective preference or the relevance of experience can have a strong influence on the effectiveness of experience-based heuristics. Further, compared with the learning effect of general heuristic strategy and complicated algorithms, there are no obvious learning effect of the three experience-based heuristic strategies, even for the expert experience-based model (see Figure 11). As opposed to the process of weighting and updating initial preferences in the reinforcement comparison methods, the logics of complicated algorithms and general heuristic strategy emphasize on other aspects: the former aims to discriminate errors while balancing an optimistic policy toward exploration. The latter employs a simple exploration strategy while conservatively adjusts the behavior according to the expected average reward of the alternatives. Thus, under the circumstances of environmental unpredictability and lack of relevant expertise, the rationales of general simple heuristics and sophisticated mathematic algorithms appear to be more reliable than heuristic strategies drawing on specific experience.

We think that these findings provide insights for a configurative analysis of the effectiveness of heuristics, and inform the design of strategic heuristics from prescriptive analytic perspectives. We understand that, as a pilot study, there are limitations in the simulation experiments conducted in this research. For example, we suspect that, different settings of the parameters, such as the learning rate assumptions in the reinforcement comparison methods could significantly influence the relative performance of this experience-based heuristic model. We will consider tuning these parameters and testing the sensitivity of the simulation results. Further, as a next step to advance our theoretical framework, we plan to use empirical real data for the simulation model, and compare the results with those from the experiments in this study.

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# CONSUMERS' REACTION TOWARD SELLER'S POSITIVE REVIEW REWARD INVITATION

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## ABSTRACT

*Consumers nowadays are always influenced by online reviews in making purchase decisions. Many sellers provide monetary incentives for getting favorable or positively biased consumer reviews. This study examines consumers' responses to sellers' positively biased review invitations and thereafter their trust in the sellers and e-retailer review system. The moderating roles of shopping experience and altruism are examined as well.*

**Keywords:** fake online reviews; monetary reward, shopping experience; altruism; positively biased review intentions.

## INTRODUCTION

Nowadays, online consumer reviews have become an important source of information for consumers' purchasing decisions (Cheng and Ho, 2015; Zhu and Zhang, 2010), especially in new product adoption situations (Kawakami and Parry, 2013). So, many sellers provide monetary incentives for getting favorable or positively biased consumer reviews. For instance, a New York Times report titled "For \$2 a star, an online retailer gets 5-star reviews" revealed that some Amazon retailers have offered refunds to consumers who agree to post positive online reviews which may be biased (Streitfeld, 2012). Such practice undoubtedly indicates the emerging of unethical marketing communications strategy (Bush et al., 2000). In recent years, several studies have highlighted the issues of biased online reviews (Reichling 2004; Hu et al. 2006; Dellarocas and Wood, 2008) and indicated that some online reviews were indeed manipulated by the sellers (Goldsborough, 2010). In addition to the manipulation of online reviews, product sellers have started to use monetary incentives to influence the results of consumer reviews. Although this may be a kind of emerging marketing communication strategies, such unethical practice may be detrimental to the entire online review system.

When consumers receive a product from an online seller, it is now not uncommon for them to receive an invitation for providing a review. The request may simply ask for providing genuine reviews with a little incentive. As compared with well-developed societies like the United States, the business people in emerging markets like China may have different social values and a great number of them are less likely to feel that social responsibility and profitability need to be compatible (Shafer et al., 2007). Based on observations, many Chinese firms in China nowadays commonly pay money for getting the best reviews and ratings. Most of them are customer-to-customer (C2C) companies. Online sellers in Taobao.com (the largest online trading platform in Asia, operated by Alibaba Group in China) always send the products together with "review invitation cards" to the buyers and ask for a "5-star rating review" with monetary incentive. In fact, how many positively biased or fake online reviews would be created by such invitations? The answer to this crucial question may depend on the behavioral reactions of consumers who have received the invitation cards. Under what circumstances would the consumers be likely to provide a positively biased or fake review? How does the online review invitations ultimately influence the consumers' evaluation of the sellers and even the entire e-retailer review system? These questions have indeed not been thoroughly addressed in the existing literature. In this study, biased reviews refer to partial judgement and untrue comments provided by consumers, and may include fake reviews. Specifically, the major research objective is to examine consumers'

responses to sellers' positively biased review invitations and thereafter their trust in the sellers and e-retailer review system. This study also investigates the roles of shopping experience, altruism, and monetary reward amount. Positively biased review intention is expected to be affected by the satisfaction level of shopping experience and monetary reward amount. However, altruism is likely to influence the moderating role of shopping experience. An unethical review invitation with monetary reward may attenuate consumers' trust in the results of the sellers' reviews and ratings. A spillover effect may occur as distrust in the seller may generalize to the entire e-retailer online review system.

## THEORETICAL BACKGROUND

Consumers' motivations for engaging in WOM communications may differ and depend on the nature of their shopping experiences (Klein et al., 2016; Sundaram et al., 1998). According to equity theory, a person makes social comparisons of his/her inputs and outcomes with a reference other (could be another person or group), and inequity appears when perceived ratios of inputs/outputs are unequal between his/her and a reference other (Adams, 1963). An inequity could create tension (Adams, 1965) and subsequently a sense of dissatisfaction or other emotional state like resentment, anger or guilt (Lapidus and Pinkerton, 1995). Consequently, a person may desire to reduce the tension or inequity by changing his/her inputs, changing his/her perception of outcomes or leaving the relationship (Walster et al., 1973).

In a business transaction, consumers compare their inputs and outcomes to the perceived inputs and outcomes of the seller so as to assess whether the transaction is equitable (Lapidus and Pinkerton, 1995). If consumers perceive a higher output/input ratio than the company does, the inequity perception may appear, so they may want to help the company succeed (Sundaram et al., 1998). For instance, they may seek to help the seller by recommending their purchased products or services through the Internet. Thus, the output/input ratio may be equalized (Hennig-Thurau et al., 2004). Follow the above logic, when consumers have a satisfactory online shopping experience (i.e., when the perceived value of the product purchased is greater than the consumers' expectations), they would have an eagerness to provide the seller a positive review. Such favorable or positively biased review intention to provide a very high rating with positive comments would happen even without the monetary reward invitation from the seller. Therefore, the effect of online review invitation with or without monetary incentives on the satisfied consumers' review intention may not be different significantly, as the favorable or positively biased review intention is already at a high level.

In contrast, dissatisfied online shopping consumers would perceive a lower output/input ratio when comparing the seller's output and input, which may generate inequity feelings. As a result, they would desire to do something to reduce such inequity (Walster et al., 1973). They may select one of the two ways, i.e., either return the product to seller or give a negative product review. First, they can return the product or request a replacement based on the liberal return policies in the present online industry (Ketzenberg and Zuidwijk, 2009). Researchers have found that consumers' dissatisfaction with the product significantly increases their product return intentions (Jiang and Rosenbloom, 2005), but a product return fee may be an additional cost for the consumers to bear under the policy commonly used by e-retailers such as Amazon.com or Taobao.com. This policy is known as an equity-based return shipping policy (Bower and Maxham, 2012). Therefore, consumers typically have a baseline threshold level for returning products according to their dissatisfaction level (Oliver, 1997).

Second, if consumers perceive a low output/input ratio related to a seller's products, they may seek retribution by damaging the seller's reputation with a negative rating (Lafky, 2014) or share their experiences with others in a form of negative review (Sundaram et al., 1998). Venting negative feelings may reduce the frustration and anxiety associated with negative experiences (Sundaram et al., 1998). Providing a negative review may indeed help consumers regain their sense of emotional balance. However, consumers may sometimes encounter a dilemma and consider whether they should receive some money back or punish the seller by posting a negative review, particularly if they are only slightly dissatisfied. If the consumers accept the monetary reward invitation and unethically provide positively biased reviews that do not obviously reflect their actual product experiences, they may perceive the reward as a compensation. Such kind of compensation can help improve the consumers' output/input ratio and encourage a more favorable perception of equity in the transaction (Oliver and DeSarbo, 1988). Therefore, we hypothesize:

H1: The effect of monetary reward invitation on positively biased online review intention is moderated by consumers' shopping experience.



- (a) For consumers having dissatisfied shopping experience, their positively biased online review intention will be greater for having monetary reward (vs. without monetary reward).
- (b) For consumers having satisfied shopping experience, their positively biased online review intention will have no significant difference between the conditions of having monetary reward and without monetary reward.

Furthermore, altruism usually describes the acting with the goal of benefiting another person without the expectation of rewards (Berkowitz, 1972; McConnell, 1997; Suh and Harrison, 2006). In online condition, this term is used to describe consumer's sharing information without expecting a reward in return (Shiau and Chau, 2015). Existing literatures have identified altruism to be an important motivation for consumer online behavior, such as consumer behavior in online communities (Utz, 2009), online content contribution (e.g., online reviews) (Teichmann et al., 2015), post their purchasing experiences online solely to benefit others (Cheung and Lee, 2012), helping to make good buying decisions and saving from negative shopping experiences (Hennig-Thurau et al., 2004), and assist online group buyers in buying products easily (Shiau and Chau, 2015). People differences in their altruistic behavior because of their different level of altruistic personality (Rushton et al., 1981). An altruistic personality refers to an individual's internal value system, particularly the tendency to help others because of a genuine concern for others' well-being, regardless of social or motivational reinforcement (Romer et al., 1986). Individuals with highly altruistic personalities are more likely to show a willingness to provide online assistance (Lee and Lee, 2010) and share knowledge in online communities (Jadin et al., 2013). When getting a positive review invitation with monetary rewards, consumers may provide positively biased or fake reviews if they receive benefits from the sellers. However, motivational conflicts may occur particularly for consumers having a high level of altruism which has a concern for the welfare of others. When such conflicts happen between selfish motives and behaviors that promote social acceptance, self-regulation will follow (Baumeister and Vohs, 2007), which means that individual override initial (impulsive) responses with the aim of adhering to his/her norms or standards (Vohs and Heatherton, 2000). Thus, consumers with high altruism may tend not to accept a rewarded online review invitation to provide biased or fake positive review. Even if they are slightly dissatisfied with the products, they may still insist on posting a negative review to warn other consumers. In contrast, consumers with low altruism facing the same situation may tend to consider the rewarded invitation under a cost-benefit perspective and are likely to post a biased online review so as to obtain the money, particularly when the reward amount is large. The findings of the first study suggested that when consumers had a satisfied shopping experience, their positive review intention remain unchanged even though there was monetary reward, as their positive review intention was already at a high level. For a very dissatisfied condition (e.g., a major product defect which may arise when the product received was broken, missing pieces, not functioning, or damaged in some way), consumers will show strong product return intentions and refuse to keep the product. They tend not to provide biased review even for incentives such as monetary reward (Forbes et al., 2005; Weun et al., 2004). Therefore, the effect of reward amount on positively biased review intention in the satisfied and very dissatisfied conditions will not be as prominent as in the slightly satisfied condition. As indicated by Forbes et al. (2005), slightly dissatisfied consumers (e.g., when the ordered product has minor defects such as color deviation or scratches of product surface) are more reluctant to return the product than very dissatisfied consumers because their satisfaction level is still at an acceptable level. They are more sensitive to the amount of reward. The reward amount may be critical because those slightly dissatisfied consumers feel more satisfied when the seller offers them a reward or compensatory incentive (Smith et al., 1999). Therefore, we hypothesize:

H2: Consumers with low (vs. high) altruism are more likely to provide a positively biased online review, particularly when the reward amount is large. However, such relationship will be stronger when the consumers are slightly dissatisfied.

Additionally, for consumers having dissatisfied shopping experience, they are likely to query about the trustworthiness of the seller when they are asked to provide a positively biased online review for the seller. For an invitation to provide biased online review, it can be easily considered as an unethical behavior for generating fake or misleading information (Ma and Lee, 2014). It is indeed unethical to provide biased or fake online reviews. A review invitation with monetary reward may further lead to consumer cynicism, and such rewarded invitation may be treated as a kind of poorly conceived marketing practices (Chylinski and Chu, 2010). Therefore, when dissatisfied consumers have received a rewarded online review invitation for making a biased review, they are likely to form a feeling of distrust toward the seller's rating record and credibility. Such distrust feeling may even spillover toward the entire re-retailer review system. Since immorally based information or unethical behavior can create conflicts with consumers' moral or social values, they are negatively evaluated by consumers (Votola and Unnava, 2006). Consumers who

receive an unethical online review invitation may infer that such invitation was also sent to other consumers who bought the seller's product. More importantly, they may think that many biased ratings and reviews are produced via the rewarded invitation. In the study of spillover effect of negative information on competing brands, Janakiraman et al. (2009) indicated that when consumers find unethical behavior in one seller, they are likely to suspect other sellers performing the similar unethical behavior. When consumers find that there are unethical and biased online reviews by one seller, they will think other sellers also have such unethical problems. A distrust toward a particular seller can generalize to the entire online rating and review system. Thus, we hypothesize:

H3: Consumer trust in (a) seller and (b) e-retailer review system is negatively affected by an online review invitation with monetary reward, particularly when consumers' shopping experience is dissatisfied.

## CONCLUSION

All hypotheses will be examined in two studies through experimental design. The experiments will be conducted before July, the data analysis work will be finished before August. We hope our findings will contribute to the business ethics and consumer behavior literature.

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# SMART CITIES IN UNCERTAIN TIMES

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## ABSTRACT

*The subject of “Smart Cities” or “Smart City”, which is a huge part of the digital economy, like the digital economy itself, is global in its essence and becomes an integral part of the modern world and cannot be closed by any one city or one country. Therefore, the paper considers the place of today's cities in the current world economy and forecasts for their development. The formation of the system of international standardization of smart cities is shown. Indicators of smart cities are listed by areas of their socio-economic development.*

**Keywords:** Smart Cities, Digital Economy, Smart Systems, ISO.

## INTRODUCTION

The City (and any urban agglomeration) needs a new quality of solutions based on the widespread use of IT to ensure the economical and environmentally friendly use of urban livelihood systems to support continuous and sustainable development. The concept of a smart city ("smart city") implies the modernization of the city's infrastructure with fundamentally new possibilities of centralized management, a new level of services and security provided. This strategic development combines the various factors of urban development into a single system. Smart city is characterized by the combination of areas of urban planning, which require the use of IT tools, as well as special ("smart") technologies, methods, calculations. This concept recognizes the role of artificial intelligence, information and communication technologies, social and environmental potential as a resource that determines the digital economic development and competitiveness of the city.

## History of Smart Cities

According to the Revision of World Urbanization Prospects (2018) to 2019 56% of the world's population lives in cities. World Urbanization Prospect Report (2014) showed, that in 1950, it was only 30%, in 2030 will account for 60% of the world's population and by 2050 it is expected that 68% of the world's inhabitants will have a residence in cities. Almost all population growth in the future will occur due to an increase in the number of urban residents. If we take regional distributions, then in North America in 2014 the urban population was 82%, in Latin America and the Caribbean 80%, in Europe 73%, and in Africa and Asia it is 40% and 48%, respectively. In Russia, according to ONN data, in 2014, 73% of urban residents are from the country's population, exactly as in Europe. At the same time, the pace of urbanization and Africa and Asia are the fastest in the world and it is expected that by 2050 these figures will be 56% (Africa) and 64% (Asia). It is clear that the growth of urban residents is based on changes in status from rural to urban, as well as on the natural growth of citizens. The world's rural population in 2014 was 3.4 billion people in absolute terms, and by 2050 the forecast will be 3.2 billion people. Today, Asia and Africa together comprise 90% of the rural inhabitants of the earth. The largest rural population in the world is India – 857 million people and China - 635 million people. In absolute terms, today (2014), 3.9 billion people live in cities and another 2.5 billion will be added to them by 2050 and only three countries, India, China and Nigeria, will give 37% of this increase. In absolute

terms, it will be: India - 404 million, China - 292 million and Nigeria - 212 million. In 2014, half of the urban population lives in small cities with a population of less than 500,000 inhabitants and only 1 out of 8 inhabitants lives in 28 megacities world with a population of more than 10 million people. These megacities are Tokyo (38 million), Delhi (25), Shanghai (23) and Mexico City, Mumbai and São Paulo, with 21 million inhabitants each.

Until now, in the former paradigm of industrial development, the cities factor did not play a significant role, but the transition to the digital economy has already required a revision of these views. It is worth noting that the World Economic Forum (WEF) practically recorded in 2016 the transition of the world economy to the fourth technological way of life of humanity that, like the position of the UN, is the collective opinion of all humanity. Of course, the new Kyoto agreement, signed in Paris in 2015, to combat global warming, should also become a “red thread” in the topic of smart cities.

## **DEVELOPMENT OF SMART CITIES**

A smart city is: smart management, smart living, smart people, smart environment, smart economy, smart mobility. The list of areas that require the introduction of smart technologies covers almost all areas of urban economy and urban infrastructure without exception: analytics, banking, buildings, commerce, e-government, communications, education, energy, emergency situations, catering, health care, manufacturing and services, transportation, retail, public safety, ecology and environmental monitoring, water and gas supply, and much more. The process of “intellectualization” of urban management is a rather complex phenomenon that requires consideration of very many factors, including the differences introduced by residents of various places.

Each city is unique and needs to be develop according to local priorities, history, culture, geographical location, size and economy. It is worth noting that cities occupy only 2% of the land surface, while they account for 75% of energy consumption and 80% of harmful emissions. At the same time, the city cannot be changed; it can only be transformed with the goals of improving the efficiency of the urban economy, living standards and sustainable development. In such a transformation, it is necessary to take into account: growing competition between cities and countries; the need to create new jobs and mainly in the standard of smart working; requirements to increase the attractiveness of the city for residents, investors and tourists.

Smart cities must address the challenges of improving the energy-efficiency of city systems; increasing the efficiency of the social sphere: these are schools and public security; improvement of living conditions and public health. Therefore, it is necessary to plan this activity. Global plans for the experience of already successfully implemented projects include: energy, transport, water supply and sanitation, construction and engineering infrastructure. This implies obtaining, as a result of the implementation of the plan, more efficient infrastructures: urban planning, resources, environmental management, transport flows, and innovative services.

### **International quality standards developed for Smart Cities**

Standards, international especially, are built only on the basis of the best practices and the possibility of their wide application for solving actual problems. All of the above allowed to begin the process of standardization at the level of the parent organization in the system of international standardization - the International Organization for Standardization or ISO in 2014. The first ISO 37120: 2014 (2014) standard on indicators for Smart Cities was released in May 2014. It enabled city managers, politicians and those who plan changes in cities to objectively evaluate their progress and compare their results with what they do in other cities. Key indicators or measurements in this standard allow, in its implementation, to clearly focus on its performance. ISO 37120: 2014 was made as part of a future set of standards and this set of standards will have to ensure the continued and sustainable development of urban entities. It is designed so that it can be applied in any city, municipality or local government, regardless of their size, location or level of development. The set of indicators in the standard also provides basic statistical indicators and certain types of information in order to help officials select those cities that are best suited in terms of their development plans and capabilities to the requirements of this standard.

The following areas of urban life are described in ISO 37120: 2014:

- economics,

- education,
- energy,
- environment,
- finance,
- emergency situations and fires,
- management,
- health care,
- leisure and entertainment,
- safety,
- shelters,
- municipal solid waste,
- telecommunications and innovations,
- transport,
- urban planning,
- water systems and sanitation.

The practical benefits of applying ISO 37120: 2014 can be:

- more efficient management and implementation of services,
- accessibility of international results assessments,
- transparency of local assessments and, as a result, sound planning,
- the use of its provisions and results for political decisions and in daily practice by city managers,
- mutual learning between cities understood by the parties,
- use it as a methodical and practical guide for substantiating, in understood terms, requests for funding from various funds (international and country),
- to improve the investment climate, planning the economic development of cities, the region and countries.

In September of 2015, a report ISO 37120:2014 Sustainable development of communities -- Indicators for city services and quality of life (2014) was issued, in which, among the areas being standardized in the near future, issues of a smart city telecom operator are considered. Today, the British have made and are making today the greatest contributions to the development of the standards of the Smart City, as well as to the practical implementation of the standards and business of creating smart cities themselves.

## **SMART CITIES: THE EXPERIENCE OF THE UK**

After the UK published the world's first standards for smart cities, at the end of 2014, this area was given special attention. The reasons are obvious. The digital economy was born and for the most part lives in cities. It is in the cities lives, and will live most of humanity. Cities are the most vulnerable and most comfortable for a person - it means that they need to be transformed into a new state - smart cities or cities that automatically react in the most optimal way to various changes.

This is how the British organization CATAPULT FUTURE CITY appeared. First, there appeared a fundamental work with the government and Foresight (2014), and then practical work began in London and other cities of Great Britain, China, India, Brazil in the framework and in the spirit of the adopted ISO standard. The British work in cooperation with Europeans in European cities and other countries. For example, according to The Internet of Things making the most of Second Digital Revolution (2014) and Industry 4.0 and Urban Development. The Case of India (2015) the Acatech, the German science and technology leader of the German Industry 4.0 (2014), does work in Indian cities, and Finnish VTT in Arab and Chinese cities. Smart cities are also developing quite actively in Germany. VTT is a research and development center in Finland. It employs about 500 employees. However, they perform a lot of work and this is actually scientific and practical research. VTT, however, is a recognized European center for the digital economy, which also carries out international research. Finland is a northern country, but which wants to live in a normal environmental situation. Accordingly, there is, for example, a fully developed program to reduce carbon fiber, and this work was carried out among the first in Europe. The book on intelligent mobility of transport, taking into account the ecology, is generally considered unique.

By the time of the real start of the smart city theme, the UK has already achieved extremely positive results in implementing the information modeling program (BIM) for the country's construction industry and, on the basis of these results, it was decided to switch to a digital economy program in which cities occupy a large part – the opinion of Kupriyanovskiy V.P. i dr (2016). Strictly speaking, the formal launch of the UK transition to a digital economy was recorded by a decision of their government in February 2015. This document determines that the development of the digital economy will be based on the organizational, technical and economic results of the information modeling phase (BIM).

Firstly, BIM included in the turnover a huge array of objective data on the physical and other dimensions of buildings, structures and infrastructure facilities of the country. Secondly, since practically very many “smart” solutions cannot be implemented without physical transformations, i.e. projects and construction, then regulations appeared already derived from BIM. At the first BIM stage, this was defined by the term Level2, and at the second, i.e. stage of the continuation of the BIM project and the beginning of the digital economy and smart cities - the term Level3. Thus, the economic effect of multiplication or synergy of projects and, accordingly, their total cost reduction is achieved.

One of the main tasks determined by the decisions of the Government of the United Kingdom during the transition to Level3 is building the country's digital economy and developing intelligent cities based on BIM-GIS methods, the Internet of things (IOT), big data (BIG DATA), cyber-physical systems (CPS), smart working environments, web technologies, including the semantic Internet (WEB, WEB 2.0).

One of the technologies developed at UCL was the Space Syntax technology, which allows for:

- evaluation of the spatial model of the building;
- optimization of visual control and access to the building model to minimize maintenance staff;
- a spatial assessment of the model in terms of how it will influence the management of the object and OpEx / CapEx costs.

The UK experience is applicable to large and medium cities around the world.

## Smart City Indicators

Currently, elements of the "smart city" are being introduced in different cities. But the question arises: how to understand in which directions administrations need to put the greatest efforts, how to measure the current state of the city “cleverness”. These questions are answered by international ISO standards. Indicators allow you to assess the current state of the urban economy, services and show how using technology can improve indicators. (see Table 1) \Having measured these indicators, the city administration can understand what to look for in the first place, what needs to be implemented in the future.

**Table 1: Smart City Indicators on directions of socio-economic development.**

The direction of socio-economic development	The direction of Smart city	Smart City Indicators
Markets	Smart economy	The level of development of urban infrastructure for research and innovation
		The level of development of activities in the field of information and communication technologies
		The level of development of the system of online booking of accommodation
Institutes	Smart management	The level of development of info communication systems of the city administration of strategic planning
		The level of information openness of city authorities
		Level of citizen involvement in city management
		Attendance level of official city portals of the city administration

		The level of development of documents
Human capital	Smart inhabitants (citizens)	The level of availability of information about the labor market in the city
		Internet user activity level
		The level of development of electronic student cards
Innovation and Information	Smart technologies	The level of development of free wireless access networks
		The level of development of mobile broadband networks
		The level of development of communication networks for telemetry services
		The level of development of free wireless access services in public transport
Natural resources	Smart environment	The level of activity of residents and city administration in the elimination of illegal dumps
		The level of development of monitoring systems and the prevention of threats to environmental safety
Space and real capital	Smart infrastructure	The level of development of the system of automatic fixation of traffic violations of gas stations for electric vehicles
		The level of development of urban management information systems
		The level of development of car-sharing services in the city
		The level of development of online public transport monitoring services
		The level of development of online services to search, call and pay a taxi
		Network development level
Investment and financial capital	Smart finance	The level of development of banking self-service systems
		Level of public procurement transparency
		The level of development of cashless fare

The indicators are based on the following:

- the possibility of collecting objective data from open sources, uniformity,
- should be suitable for each city,
- must have the ability to meet the challenges of managing cities in both the short and long term.

The indicators used are aimed at the socio-economic development of urban agglomerations and are applicable to improve the system of municipal management of "smart cities".

## CONCLUSION

The term "Smart Cities" is no longer considered only in the annex to the cities proper, but is interpreted more broadly. Today it is already customary to single out the following agglomerations or they are called Mega-hubs of the digital economy (according to the UN):

1. Mega-cities and in fact regional "capitals" of the global digital economy. This is Greater London, New York, Greater Paris, Shanghai and Sao Paulo.
2. Mega-regions, such as Johannesburg and Pretoria, forming a single economic region with a population of more than 15 million people and largely determining the economy of South Africa.



3. Mega-corridors that connect mega-cities through mega-regions such as Hong-Hong-Shenzhen-Guangzhou in China (population over 120 million).
  4. Cities with a population of more than 0.5 million people.
  5. Neighboring cities and towns.
- “Smart City” is a tool for achieving the strategic goals of the city’s socio-economic development. Smart cities should provide additional development opportunities for cities and countries of the world in uncertain times/

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# CUSTOMER SATISFACTION IN SME GROCERY RETAILERS: THE ROLE OF CUSTOMER INTERACTION AND INNOVATIVENESS

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## ABSTRACT

*The voice of the customer is fundamental in the product and service development process. SME grocery retailers need to understand customer insights that are likely to be valued in the future as consumers are a foundation for knowledge generation for innovative solutions which might lead to satisfaction. However, there are few empirical studies and insights on the nature of this relationship. This paper draws on the social exchange theory (SET) to empirically assess the relationship between customer interaction, customer innovativeness and customer satisfaction in the context of SME grocery retailers in South Africa.*

**Keywords:** Customer interaction, innovativeness, satisfaction, SME grocery retailers.

## INTRODUCTION

Although Small and Medium Enterprise (SME) grocery retailers drive a strong force at stimulating the South African economy, the growing number of large retailers are making it challenging for small retailers to grow and be sustainable (Khare, 2014). SME retailers are faced with the problem of out-shopping behaviour, where customers prefer in out-of-town locations for their shopping (Mullis & Kim, 2011), as they tend to patronise big retail outlets. The reason being that the bigger retail outlets have an assortment of different products to select from (Patel, Bhatt, Shukla & Gadhavi, 2015). Therefore, for survival, small retailers need to be more observant in retorting to present day competitive changes in the market if they want to maintain their existence (Srivastava, Kumar & Agnihotri, 2016). These changes may include making the customer the centre of their product or service development process for a holistic experience. Moreover, constant interactions with the customer can be employed as an innovative strategy that provides SME grocery retailers with an opportunity for differentiation from the more impersonal nature of the large store setting (Megicks, 2007). Differentiation can be attained through customer interaction, which allows customers to participate and interact with the retailer in customising their product and service offering to meet their needs, which may positively influence customer innovativeness and, in turn satisfaction. Siu, Zhang and Yau (2013), proposed that satisfied customers tend to patronise a retailer and remain loyal. Undoubtedly, the success of any business is controlled by loyal customers who tend to favour that business (Majid, Sharif, Sulong Omar, Yassin, Raju & Zakaria, 2017). Therefore, the aim of this research is to investigate the role of customer interaction and customer innovativeness in driving customer satisfaction in SME grocery retailers.

## LITERATURE REVIEW

### Social Exchange Theory (SET)

The theoretical grounding for the current study is the Social Exchange Theory (SET). SET relies on norms to explain series of interactions between two parties, which are the sender and receiver that generate obligations (Emerson, 1976). These relations, as initially anchored by Blau (1964) in Bellingkrodt and Wallenburg (2015) are commonly seen as inter-reliant and dependent on the actions of another individual, which indicates that creating optimistic experience

influences the other party in the relationship to provide some kind of valued return in interactions in the future. Likewise, SET puts more emphasis on how these inter-reliant interactions have the probability to produce relationships of high quality (Cropanzano & Mitchell, 2005). Conferring this further, Cropanzano and Mitchell (2005) allude, that one of the rudimentary beliefs of SET is that associations develop over a period into mutual commitments, trust and loyalty. However, in order for this relationship to be beneficial, both parties need to obey the rules of the exchange process. Furthermore, if the receiver in the exchange process replies by offering something that the sender values, then the basis for the continuing interchange is recognised and the growth of a long-term exchange connection becomes conceivable (Zablah et al., 2016).

Applying this theory to the conceptual framework of the study, for a sustainable long-term relationship to be attained with customers, small retailers need to ensure that service quality meets and exceeds the expectations of the customers. In this instance, the study proposes that there is a positive linkage between customer interaction, innovation and satisfaction. However, as reiterated by Malik (2012), satisfaction becomes protuberant when the customers' prospects have been surpassed. Moreover, interaction with consumers encourages greater customer satisfaction (Yi & Gong, 2009), which signifies that as consumers obtain support from the small retailer in terms of allowing them to engage with the retailer and be part of the co-creation process of the service or product delivery process they are likely to be satisfied (Yi & Gong, 2009). Additionally, through consumer collaboration service companies such as retailers can offer advices and guidelines on how to utilise the service, therefore, increasing the value for the consumer (Bellingkrodt & Wallenburg, 2015). It is therefore important that the relationship between customer interaction, customer innovativeness and satisfaction be explored in the small retailing context. Scholars (Flint, Larsson & Gammelgaard, 2008), mention that the voice of the customer is crucial in the product development process, which means that firms need to understand and know customer insights that are likely to be valued in the future as consumers provide valuable perceptions for innovation. Yet, there is a lack of empirical research and insights on the nature of the relationship between customer interaction, innovativeness and satisfaction, especially in the small retailing context in emerging economies. To address this gap, this study proposes a conceptual framework that draws on the Social Exchange Theory (SET).

## **Customer interaction**

Customers exemplify a valuable foundation for market knowledge for businesses (Schaarschmidt, Walsh & Evanschitzky, 2018). Given the intensity of competition, especially in industries such as retail, many businesses have progressively taken advantage of opportunities that arise through customer knowledge in order to differentiate themselves by empowering and interacting with customers to co-create their consumption experiences (Neuhof, 2016). Customer interaction is the degree to which a service provider interacts with customers during product or service development or process, which includes interactions such as customer recommendations and information sharing (Schaarschmidt et al., 2018). Customer interaction further denotes the consistency and intensity of personal interaction a firm has with customers in order to maintain frequent communication, close working relationships and personal interaction (Zablah, Carlson, Donovan, Maxham & Brown, 2016). Therefore, when customers are allowed to be interactive with a product or service offering, a firm achieves higher levels of innovativeness and customer satisfaction (Ennew, Binks & Chiplin, 2015).

## **Customer innovativeness**

Customer innovativeness is measured to be one of the key concepts in the consumer behaviour spectrum (Hassan, 2017). According to Jin, Line and Merkebu (2016), customer innovation is the propensity of an individual to embrace and accept unique products, ideas and services. Innovative customers are more fascinated by innovative firms as they tend to enjoy creative exploration (Jin, Line & Merkebu, 2016). When a retailer benefits from customer insights of its innovativeness, a view can be formed if customers consider the retailer to offer more innovative products and services than competing retailers can (Lin, 2016). The main driver of customer innovativeness is the delight linked to trying a new product or service, which stimulates a desire to an increased tendency to consume these products and services (Jin et al., 2016).

## **Customer satisfaction**

Satisfaction is a crucial construct as it is the first step that leads to loyalty (Dincer & Dincer, 2015). Orel and Kara (2014) describe customer satisfaction as the level of a person's felt state causing a comparison of a service or product's perceived performance with his or her own expectations. Overall satisfaction is a moving average that is comparatively steady and most similar to a general attitude towards buying a product (Eid, 2015). Hence, customer satisfaction has been regarded as an essential element in sustaining a long-term customer relationship (Siu *et al.*, 2013).

## **CONCEPTUAL MODEL AND HYPOTHESES**

### **Customer interaction and customer innovativeness**

Customer interaction and communication is relevant for innovativeness and customer satisfaction (Ennew, Binks & Chiplin, 2015). Consumers who enthusiastically partake in firms' activities are likely to generate customised product and services offerings for themselves (Ngo & O'Cass, 2013). Therefore, it is hypothesised that:

H1: Customer interaction has a significant influence on customer innovativeness.

### **Customer innovativeness and customer satisfaction**

According to Dincer and Dincer (2015), customer innovativeness is an important predictor for satisfaction. As such, consumer opinions of retailer innovation can be conceptualised as cognitions and behaviour reactions induced by store-related inducements that are part of the store offerings (Lin, 2016). This observation results in greater purposes of the customer to purchase directly from that store (Lin, 2016), in turn yielding consumer satisfaction (Bellingkrodt & Wallenburg, 2015). Customers who are innovative tend to adopt and be satisfied with innovative products and service methods (Dincer & Dincer, 2015). Therefore, this study hypothesises that:

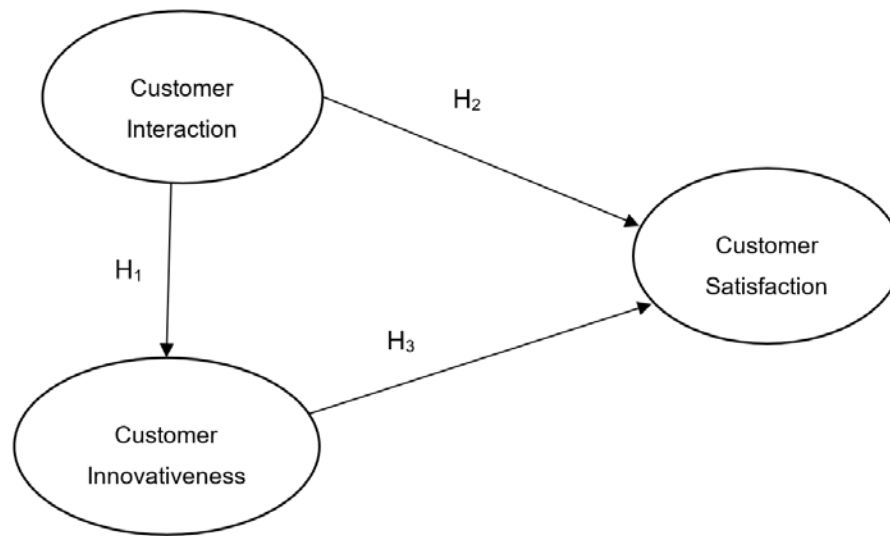
H2: Customer innovativeness has an impact on customer satisfaction.

### **Customer interaction and customer satisfaction**

Interacting with customers can prompt greater customer satisfaction, as consumers obtain support and responsiveness from a firm, they will feel better about the product or service they are receiving, and subsequently, show satisfaction (Yi & Gong, 2009). Collaborating with customers impacts on customer satisfaction positively (Bellingkrodt & Wallenburg, 2015). Therefore, it is hypothesised that:

H3: customer interaction has a positive effect on customer satisfaction.

**Figure 1: Conceptual model.**



## RESEARCH METHODOLOGY

Research measurement scales for the variables were selected and adapted from existing research (Yeh, 2016; Nanda, Kuruvilla & Murty, 2013; Hur, Yoo & Chung, 2012). It was a challenge to retrieve a customer database in order to draw a sample from. Therefore, a non-probability convenience sampling was employed as it allows the scholars to gather data that they would not normally have admittance to if probability-sampling technique were applied (Tucker, Windapo & Cattell, 2015). Research data were collected from 500 customers who patronise SME grocery retailers. Structural Equation Modelling (SEM) was performed to measure the study's conceptualised research model. SEM was undertaken to examine the causal relationships between the constructs under investigation. Prior to testing the hypotheses, confirmatory factor analysis (CFA) was performed to examine validity of the measured constructs. To test reliability, Cronbach's Alpha was obtained.

## RESULTS AND FINDINGS

Descriptive analysis of respondents was conducted using SPSS. The demographic profile and characteristics of the respondents were largely females (61%) and males comprised of the remaining (39%). The dominant age category of the respondents was 26-35 years, comprising of (39%). About (47%) of the respondents were employed. Approximately (68%), of respondents' monthly income ranged between R 5000 – R 10 000. Reliability of the variables was verified utilising the Cronbach's alpha ( $\alpha$ ) (which are all above 0.7) and composite reliability, as shown in Table 1 are greater than 0.6 and factor loadings are also greater than 0.5 which is an acceptable threshold (Pontes & Griffiths, 2015). The validity of the constructs was inspected by means of discriminant validity. Discriminant validity was evaluated using the Average Variance Extracted (AVE). As presented in Table 1 the AVE for the three constructs is above 0.5 which is an acceptable indicator as recommended by Fornell and Larcker (1981). SEM was executed to assess the study's proposed research model. The outcomes show a satisfactory fit of the model: chi-square value over degrees = 112,458 (51 degrees of freedom), CMIN/ DF= 2.20; GFI = 0.96; TLI = 0.96; CFI = 0.97; NFI = 0.95; RMSEA = 0.04. As presented in Table 2, the hypotheses were examined and analysed using path modelling in AMOS. The supported hypotheses are presented with the three asterisks (\*\*\*)

**Table 1: Factor analysis results.**

Research constructs		Cronbach's Alpha ( $\alpha$ )	Composite Reliability (CR)	Factor Loadings	Average Variance Extracted (AVE)
Customer Interaction (CI)	CE1	0.86	0.85	0.69	0.85
	CE2			0.72	
	CE3			0.85	
	CE4			0.82	
Customer Innovativeness (CI)	CI1	0.76	0.75	0.56	0.71
	CI2			0.83	
	CI3			0.74	
Customer Satisfaction (CS)	CS1	0.83	0.83	0.64	0.85
	CS2			0.64	
	CS3			0.75	
	CS4			0.75	
	CS5			0.74	

**Table 2: Hypothesis test results.**

Hypothesised relationships	Hypotheses	Path Coefficients ( $\beta$ )	P-values	Supported / Not supported
CI → CI	H1	0.40	***	Supported and significant
CI → CS	H2	0.16	***	Supported and significant
CI → CS	H3	0.39	***	Supported and significant

Significant @ \* = 0.001; \*\* = 0.05; \*\*\* = 0.01

The aim of this research was to explore the relation amongst customer engagement, customer innovativeness and customer satisfaction. Constructed on existing theory and literature, the three proposed hypotheses were all significant and supported. The results show that customer interaction has a positive relationship with customer innovativeness ( $\beta = 0.40$ ;  $p = 0.01$ ). Moreover, customer innovativeness is also positively correlated with customer satisfaction ( $\beta = 0.16$ ;  $p = 0.01$ ) and suggests a strong relationship between the two latent constructs. Results also indicate that the relationship between customer interaction and customer satisfaction is strong and supported ( $\beta = 0.39$ ;  $p = 0.01$ ). Thus, H1, H2 and H3 are all significant and supported. Additionally, social exchange theory states that customers are expected to respond in positive feelings, thoughts and behaviours toward an object (SME retailer), upon attaining particular benefits from the relationship with the SME retailer (Hollebeek, 2011). Positive thoughts, behaviours and feelings are positive outcomes that are represented by customer satisfaction, which the results of this study have indicated customer interaction and customer innovativeness as its antecedents. Further, social exchange consequently involves unspecified commitments, where one party (the SME retailer service personnel) doing another (the customer) a favour, by providing extraordinary service, which is motivated by the objective of some future return (customer satisfaction), leading to customer loyalty (Hollebeek, 2011).

## **PRACTICAL MANAGERIAL IMPLICATIONS AND RECOMMENDATIONS**

The justification for this study was that there is a lack of studies and insights on the nature of the association between customer interaction, innovativeness and satisfaction in SME grocery retailing context. Therefore, the outcomes of this investigation are relevant for entrepreneurs and business managers within the small retailing sector. In particular, the findings of this study provide support that customer interaction and customer innovativeness are essential for the survival and sustainability of these small retailers and should be recognised as antecedents of customer satisfaction. This means that, in order to satisfy customers, business managers and entrepreneurs of small retailers should focus on ensuring that customers are proactive in the development and customisation of product or service offerings. The positive relationship between customer interaction and customer satisfaction signifies that the small retailer is responsive towards customer needs. Moreover, this relationship highlights how important it is for small retailers to collaborate with customers to strengthen customer satisfaction.

Some of the tactics that business managers or entrepreneurs within the small retailing sector could consider is the implementation of product development and customer service surveys. Additionally, although small retailers lack adequate technological resources, it is recommended that they invest in creating a database of frequent shoppers in order to better target individual customer needs. This will in turn provide an opportunity for the small retailer to utilise digital communication in order to improve the service or product offering. The nature of a small retailer allows business owners or managers to personalise their product or service offering to better serve the end consumer. This will ensure that customers are able to interact in the product or service development process. Moreover, this study found that customer innovativeness is an important antecedent for customer satisfaction. This therefore signifies that, for customers to be satisfied with products or services within the retail store, entrepreneurs or business managers should focus on innovating their offerings. Another tactic that can be implemented by managers or entrepreneurs is starting customer community groups, where customers are able to suggest and recommend products or services that satisfy their needs and preferences, which allows customers to be innovative and proactive.

In a nutshell, SME grocery retailer managers and entrepreneurs should include customers in all product and service development processes in order for customers to be innovative and assist the retailers in customising their offerings to meet their needs, which in turn results in customer satisfaction. Satisfied customers tend to stay loyal, which is imperative for the small retailers to survive in the competitive retail landscape. In light of this, the conceptual framework proposed by this study therefore presents a platform for the prosperity and growth of these small retail businesses. The proposed model can also serve as a strategic framework that SME policy makers can consider to assist in creating an enabling business environment for SME retailers by introducing policies that allow these retailers to have access to technological resources to better service their customers and stay competitive.

## **CONCLUSION AND SUGGESTIONS FOR FURTHER RESEARCH**

The study has shown that for holistic customer satisfaction, SME grocery retailers should continuously include customers as co-creators of the product or service offerings in order to survive the competitive nature of the retailing spectrum. This study was conducted in one province in South Africa, future research can be conducted in the other eight provinces of South Africa to allow generalisability. Secondly, future studies can duplicate this model in other SME retailing sectors in other emerging markets. Thirdly, future research can replicate the model in other business sectors of SMEs.

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