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EFFECT OF STRATEGIC LEADERSHIP STYLES ON SALES AND EMPLOYMENT GROWTH IN SMALL AND MEDIUM ENTERPRISES IN NIGERIA

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Abstract

A well managed and healthy SME is characterised by high performance and act as a sources of employment opportunities and wealth creation in the environment it is located. This study seeks to examine the effect of strategic leadership styles on sales and employment growth of SMEs in Nigeria. The data for the study were collected from owners/CEOs of SMEs through a structured self-administered questionnaire using a two-stage sampling technique on a sample of 550 respondents. The leadership factors were ranked using relative importance index while the identified factors were included in the regression analysis. The results indicate that charismatic and individual consideration were related to sales growth and only inspirational motivation was significantly related to employment growth, while management by objective had negative relationship with sales growth and contingent reward was related positively to employment growth. The study concluded that improvement on charismatic leadership styles is a good catalyst to increasing sales growth and that inspirational motivation of the leadership style is not

sufficient enough to increase employment growth in SMEs.

Keywords: Strategic leadership, Sales growth, employment growth, SMEs

Introduction

Small and medium scale enterprises (SMEs) are expected to provide the driving force for the industrialization and overall development of the developing economy and also play significant roles in meeting some basic economic and industrial developmental objectives. But the extent to which the expanding SMEs in developing nation like Nigeria have achieved such goals has hardly been examined. Studies have shown that SMEs provide the training ground for the development and growth of indigenous entrepreneurs (Kilby, 1988); serve as vehicles for the propagation and diffusion of innovative ideas for far reaching dimensions (Casson, 1982); and transformation of traditional industry (Owualah, 1987). Thus a fledging SMEs sector can be a means of achieving a smooth transition from the traditional to the modern industrial sector (United Nations, 1984) and generate sustainable employment while achieving the objective function of the enterprise in form of the increased profit through an increase in sales.

There are high expectations for growth and performance of SMEs in the economic growth and development plans for Nigeria, but some salient features of these enterprises and the dynamic nature of a highly global economy make the effective and efficient contributions unattainable. Nevertheless, Kotey and Meredith (1997) maintained that owner/managers who are the strategic decision makers are billed to act as catalyst for developing this subsector because they have the

ability to understand the entire organisation and the environment within which they operate. Amos (2007) identified these leaders as strategic leaders. The way leaders who are at the top level have impact on organisation performance through their behaviours (Jung et al., 2004; Phipps & Burbach, 2010 in Oladele, Akeke, Adebisi, & Adeusi, 2013) has been emphasised in the literature. Beside, upper echelon theory maintained that organisation reflects the cognitive behaviour and characteristics of their executives and hence, determine the developmental trajectory of the firms (Hambrick, 2007; Nielson, 2010). Therefore, as leaders impact firm success, there is likelihood for growth in size of the enterprise, as such will lead to demanding for more workforces. Although, as the literature has been extensively examined over the leadership process and performance relationship, much empirical study on the aggregation of the concept of leadership process and performance were observed. The identification of those behavioural factors of the multifactor leadership questionnaire (MLQ) developed by Bass (1985) that are critical for the success of enterprises have not been examined. Thus, this study propose that in today business context characterised by crisis or major changes, it is necessary to factor out and examine the leadership characteristics that are critical in enhancing SMEs performance outcomes.

Literature review

Strategic leadership refers to the study of people at the top with potential not only to express a strategic vision for the enterprise, but to motivate and persuade others to acquire that vision. Thus, their focus is on the overall responsibility for the entire organisation whose main objective

is strategic productivity and the development of a context in which the workers can forecast organisational needs along their own jobs. Since the behavioural components of these leaders significantly affect the performance of firms (Bycio, Hacket and Allen, 1995), therefore, contemporary literature on leadership research according to Riaz and Haider (2010), focuses on transformational and transactional styles as the two main dimensions of leadership.

Transformational leaders alter the beliefs and attitudes of followers and inspire the subordinates in their own interests parallel with the betterment of the organization (Burns, 1978). Transformational leaders facilitate new understandings by increasing or altering awareness of issues. Resultantly, they foster inspiration and excitement to put extra efforts to achieve common goals. According to Burns (1978), cited in Riaz and Haider (2010), transformational leadership has four components (idealized influence, inspirational motivation, intellectual motivation, and individual consideration).

The idealized influence in transformational leadership behaviour involves sacrificing leader's own gain for the good of the organization. They are role models who build trust in people because those who work with them know that they are committed to the common good and can see the good in others first and when it is not obvious Avolio (2005) maintained that they work to bring out their subordinates strengths through continuous endeavour.

The inspirational motivation behaviour involves encouraging subordinates to generate enthusiasm and challenge people. According to Stewart (2006), these leaders create clear understanding of expectations and demonstrate high commitment to organizational goals and

shared vision. They behave in ways that motivate and inspire people around them by providing meaning and challenge to their followers' work, giving continuous encouragement and applying what Sarros and Santora (2001) called principles of shared power. This therefore arouses team spirit that enables leaders get followers involved in envisioning attractive future states (Shibru & Darshan, 2011).

The intellectual stimulation skill enables leaders not only to motivate for innovation and engage in material culture, but also make followers to challenge the old ways of doing their jobs, try new techniques, work through difficulties and use their problem solving skill for taking decisions of mutual consensus between them and followers.

The individual consideration behaviour deals with developing subordinates in the way of coaching, teaching and providing mentorship. According to Shibru and Darshan (2011), individual consideration skill treats subordinates as individual and exhibits high concern for them.

They attend to followers' needs and treat them as important contributors to the enterprise.

Transactional leadership consists of three behavioural factors: contingent reward and management by exception (active/passive). Contingent reward is behaviour that provides reward for contracts completed. Management-by-exception is the behaviour that avoids giving directions where current methods work and performance goals are met (Ejere & Abasilim, 2013)

Empirical evidence of Strategic leadership and performance relationship

Most research findings examined in the literature showed that leadership style has a significant relationship with firm performance, and that different leadership styles may have a mixed finding

with organisational performance. For instance, the study of Flanigan, Stewardson, Dew, Feig-Palmer, & Reeve (2013) on the effects of leadership styles on financial performance at the local level of an industrial distributor found that a leader's self-reported transformational leadership styles was positively associated with sales and profit margin performance while followers' ratings of a leader's transactional leadership style was negatively associated with sales performance. Rejas, Ponce, Almonte & Ponce (2006) carried

out an investigation in Chile, which was aimed at finding out whether or not leadership style influences the performance of small firms. The results revealed that transformational leadership has a positive impact on performance, while transactional leadership and laissez-faire style had negative impacts. Obiwuru, Okwu, Akpa & Nwankere (2011) carried out a survey of selected small scale enterprises in Nigeria as regard the effects of leadership styles on organisational performance and found out that while transactional leadership style had a significant positive effect on performance, transformational leadership style had positive but insignificant effect on performance. Huang (2006) study showed that a transformational leadership style has a positive correlation with performance than exchange leadership. The study of Wang, Chich-Jen & Mei-Ling (2010) found charismatic, transformational and visionary leadership are positively related to organisational performance. Muterera's (2012) study carried out in the United States of America, showed that both transactional and transformational leadership behaviours are positively related with organisational performance but that transformational leadership behaviour positively contributed to organisational performance over and above the contribution made by

transactional leadership. Sun (2002) comparative study of leadership styles with leadership performance where leadership performance correlates organisational performance in schools and enterprises found that leadership has a significantly positive correlation with organisational performance in schools as well as the enterprise.

While there have been numerous attempts by studies to appraise SMEs, research has hardly evaluated the effects of various leadership styles on desirable business performance outcomes such as growth in sales and employment. As a result, this study becomes imperative. Specifically, this study highlights the importance of strategic leadership styles that are predominant among SMEs in Nigeria and estimates the specific effects the identified leadership styles have on sales growth and employment generation.

Methodology

Area of study

The study was carried out in three of the Southwestern geopolitical regions of Nigeria. The southwestern zone lies between latitudes 4°N and 9°N and longitudes 3°E and 6.2°E. It is bounded in the North by Kwara and Kogi states; in the East by Edo and Delta states; to the South by the Atlantic Ocean and in the West by the Republic of Benin.

Research design

The research design that was employed is survey and was carried out with the use of a well structured questionnaire to collect information from respondents.

Sampling procedure and size

A two-stage sampling technique was used to elicit data from the respondents. In the first stage, three states of the Southwest region; Ekiti, Ondo and Osun were purposively selected based on the high proportion of SMEs in the states relative to others. In the second stage, a total of 550 respondents from SMEs in the study area were randomly sampled. These respondents included directors, managers and owners of SMEs.

Data collection instrument and reliability

The data were collected through the use of structured questionnaire. The questionnaire composed of 18 questions determining the leadership factors based on the Multifactor Leadership Questionnaire developed by Avolio and Bass (2004) scale, and as used by Vera and Crossan (2004). Objective and subjective methods which consist of sales and employment growth were used to measure performance based on (Whitehead, Write, & Ucbasaran, 2001; Murphy, et al., 1996) recommendations. The measures were obtained through a self reported performance by owners/ managers. Self reported were appropriate and reliable (Dess & Robinson, 1984; Fairoz, Hirobumi, & Tanaka, 2010). Reliability of the instrument was tested by Cronbach' alpha is high at 0.78

Data analysis

Data were collected on leadership strategies employed by the enterprise and variables such as sales growth and employment growth. Data collected on leadership styles were measured on 5-point Likert response scale while outcome variables such as sales and employment growth were measured on a nominal scale. Hence, relative importance index (R.I.I.) (Tonidandel,

LeBreton, & Perkins, 2006) was used to rank the leadership strategies found with the sampled SMEs prior to their inclusion in the regression analysis which was used to measure the effect of specific leadership styles. Relative importance index was first used in order to permit a greater understanding of the relationship between strategic leadership styles and change interventions. Importantly, these analyses can reveal the underlying impact of a particular predictor more accurately than standardized regression coefficients or simple correlations. Relative importance analysis is a useful supplement to analysis such as multivariate regression (Tonidandel *et al.*, 2006). In the context of this study, its primary aim was to establish the relative importance of the various factors identified as the components of strategic leadership styles and change interventions in SMEs. Multivariate regression analysis was used to model the value of multivariate dependent scale variables to two or more predictors. Assumptions of multivariate regression are; X_2 and X_3 are non-stochastic, that is, their values are fixed in repeated sampling. The error term e has a zero mean value ($\sum e/N=0$). Homoscedasticity, that is the variance of “ e ”, is constant. No autocorrelation exists between the error term and the explanatory variable. Also, no exact co-linearity exists between X_2 and X_3 . The error term “ e ” follows the normal distribution with a mean of zero and constant variance

Results and Discussion

Prior to the estimation of effect of strategic styles, various leadership styles identified with SMEs in the study area are evaluated using (R.I.I). Results (Table 1) shows that among charismatic leadership styles, the most important and relevant to SMEs, as indicated by the ranking of

respondents is the need for the organization to instill in members high levels of confidence and willingness to sacrifice. The variable has relative importance index of 89%. From the estimates of inspirational motivation, the most important characteristic is making the staff loyal to management (89.16%). Among the management elements of intellectual stimulation, the most important as indicated by the respondents is the focus on encouraging followers to treat problems with a new and overall viewpoint (82.85%). From the component of individual consideration, the most important is the focus on motivating individuals with trust and empowerment (84.39%). Hence, the identified important factors in each component of transformational leadership style were included in the regression estimates.

Table 1: Relative importance index of strategic leadership styles

Variables	SA	A	U	D	SD	R.I.I (%)	Rank
Transformational leadership styles							
Charismatic leadership							
A1	254	248	24	8	6	87.25926	3 rd
A2	300	204	26	14	0	89.04412	1 st
A3	252	246	34	4	4	87.33333	2 nd
Inspirational motivation							
A4	310	194	22	14	4	89.11765	2 nd
A5	272	226	22	2	2	89.16031	1 st
A6	262	214	44	14	2	86.86567	3 rd
Intellectual stimulation							
A7	158	262	78	32	8	79.7026	3 rd
A8	170	270	54	30	10	80.97378	2 nd
A9	188	268	50	16	10	82.85714	1 st
Individual consideration							

A10	206	244	42	36	4	83.00752	3 rd
A11	208	244	56	20	6	83.5206	2 nd
A12	204	270	42	22	0	84.38662	1 st
Transactional leadership style							
Contingent reward							
B13	122	304	72	32	6	78.80597	2 nd
B14	138	302	50	36	10	79.47761	1 st
B15	124	260	68	62	20	75.20599	3 rd
Management by objective							
B16	126	210	88	66	36	72.31939	2 nd
B17	164	218	46	80	32	74.88889	1 st
B18	132	174	52	140	44	67.74908	3 rd

Legend:

SA = Strongly Agree, **A** = Agree, **U** = Undecided, **D** = Decided, **SD** = Strongly Disagree **A1** = work enthusiasm, **A2** = instil confidence, **A3** = free opinion, **A4** = loyal to organisation **A5** = loyal to management, **A6** = inspires members, **A7** = novel thinking, **A8** = question assumption, **A9** = newer solutions, **A10** = attend to individual, **A11** = members growth **A12** = empowerment, **B13** = contingent incentives, **B14** = honouring performers, **B15** = allows negotiation, **B16** = allow initiatives, **B17** = provide job information, **B18** = ask job challenges

The estimated relationship between strategic leadership styles and sales and employment growth in SMEs is presented in Tables 2 and 3. Results in Table 2 show that charismatic leadership, individual consideration and management by objective are significantly related to sales growth of SMEs in the study area. Specifically, the result indicates that increase in

charismatic leadership styles such as the practice of instilling high level of confidence, serve as role model and willingness to sacrifice in members make them admired, respected and trusted. Thus, followers identified their personality and attracted to emulate them which is capable of significantly ($\beta = 0.24$ $p < 0.10$) increase the sales growth of SMEs and sustain positive relationship. Similarly, individual consideration is positively and significantly ($\beta = 0.64$ $p < 0.05$) related to sales growth of SMEs. This shows that the ability of a leader to exhibit the skill of paying special attention to each individual follower's needs for achievement and growth by acting as a coach, advisor, mentor, role model and particularly creating new learning opportunities with supportive climate with trust and empowerment would positively raise the growth level of sales of SMEs. This is consistent with the result of the studies of Koech and Namusonge (2012) that by being a role model will inspire, provide meaning and challenge to work of subordinates, which will stimulate their efforts to be more creative.

However, management by objective which includes denying members the capability to take initiative and only instructing subordinates on what they need to know results in negative relationship with sales growth of SMEs. An increase in objective management styles is found to be inversely and significantly ($\beta = -0.12$, $p < 0.10$) related to sales growth of SMEs in the study area which supports the work of Koech and Namusonge (2012), and Cossin and Caballero (2013), where correlation between transactional leadership and performance relationship was low. The findings imply that, in order to increase sales growth of SMEs, strategic leadership styles such as the characteristics of management by objective need to be de-emphasized or

leader be encouraged not only to provide clarity on procedures for the implementation of tasks assigned to followers but oversight prevent on the part of subordinates so that mistakes at work can be avoided (Sundik, 2013). However, leadership styles such as charismatic leadership and individual consideration should be fully implemented.

Strategic leadership styles such as inspirational intellectual and contingent leadership styles are not significantly related to sales growth of the sampled SMEs.

Table 2: Relationship between Strategic Leadership Styles and Sales Growth

Variable	Coefficient	z-value
Charismatic leadership	0.24	1.92***
Inspirational	-0.89	-0.67
Intellectual	0.04	0.42
Individual	0.64	2.57**
Contingent	-0.13	-1.23
Management by objective	-0.12	-1.75***
LR chi2	19.75	
Prob > chi2	0.003	
Log likelihood	-348.54	

** , *** , significant at 5% and 10% respectively

Results in Table 3 show the effect of strategic leadership styles on employment growth. The results indicate that leadership styles such as inspirational styles is negatively but significantly

related to employment growth of SMEs ($\beta = -0.08, p < 0.10$). The result implies that inspirational leadership does not contribute to employment growth in SMEs. However, individual consideration and contingent leadership styles positively and significantly increase employment growth. An increase in individual consideration leads to positive and significant relationship ($\beta = 0.02, p < 0.05$) with employment growth while contingent leadership styles also showed a positive and significant ($\beta = 0.02, p < 0.10$) relationship. Other leadership styles such as charismatic, intellectual and management by objective were not significantly related to employment growth although all, with the exception of management by objective, indicate a positive relationship. Charismatic leadership and intellectual style showed a positive relationship with employment growth, implying that efforts at increasing these leadership traits would have resulted into employment generation in small and medium scale enterprises. But, the variables are not statistically significant at conventional level. Inferred from the result is that employment growth may not be a reliable measure of firm performance.

Table 3: Strategic Leadership Styles and Employment Growth

Variable	Coefficient	Z-value
Charismatic leadership	0.02	0.96
Inspirational	-0.08	1.79***
Intellectual	0.01	0.80
Individual	0.02	2.36**
Contingent	0.03	1.87***

Management by objective	-0.26	-1.13
LR chi2	13.89	
Prob > chi2	0.00	
Log likelihood	-353.89	

******, *******, significant at 5% and 10% respectively

Conclusions

This study examined strategic leadership styles in SMEs and estimated the effects of the leadership styles on sales and employment growth. Evidence from the findings showed that improving on charismatic leadership styles is a good catalyst to increasing the sales growth of SMEs and sustain positive relationship. Also, management by objective styles counter effect of leadership styles on employment, the result implies that inspirational leadership is not sufficient enough to increase the level of employment growth in SMEs. However, individual consideration and contingent leadership styles are crucial. It is suggested that SME operators especially in developing nations should appraise their leadership styles using the empirical lens provided in this study.

Limitation and further research

The limiting factors in this study are that not only owners and CEOs but managers who may not take part in strategic decision making were taking as respondents. Beside, the study was undertaken using cross-sectional study and both nominal and ordinal scales were used to obtain self reported performance measures. Therefore, future research can replicate the study by using

a longitudinal study and delineate owner/CEO from managers.

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STRATEGY-PERFORMANCE RELATIONSHIP: A SCORING METHOD FRAMEWORK FOR TYPOLOGICAL RESEARCH

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Abstract

The purpose of the paper is to address the issues relating to the methodological quality applied for the identification of Miles and Snow typology when archived financial data is used. Specifically, the issues include: one, there is no standard procedure for categorization of strategic types; two, identification of reactor strategy is always ignored and excluded from the analysis; and three, the behavior of firms' strategic orientation over time is under-researched. A conceptual research framework is developed for identification of strategic types, and their consistency behavior over the time. A step-by-step coding is done in SAS. Verified outputs are also presented for ready references to replicate the process for real data sets. The framework can be used for longitudinal study for other typological classifications.

Key Words: Typology; Strategy; Scoring Methodology; SAS

Introduction

Miles and Snow (1978), in their famous work “Strategy, Structure, and Process” presented a typology to categorize the strategy types as defenders, analyzers, prospectors, and reactors along with a description of an adaptive cycle for organizations to solve their entrepreneurial, engineering, and administrative problems at various stages of organizational life cycle. Defenders are businesses that prosper through stability, and efficiency. Prospectors prosper by stimulating and meeting new product-market opportunities. Analyzers flourish by creating a balance and purposely being more innovative in their product-market initiative than defenders but doing so more cautiously and selectively than prospectors. Reactors depend on the environmental forces in their approaches and hence do not prosper at all.

Of the numerous strategy classification systems, this has been the most enduring, scrutinized, and validated strategy classification. It has been debated and supported by many researchers in a wide array of settings and domains. The typology has provided a host of relationships of various business domains. However, a number of researchers have commented on the need of further empirical validation and testing of its underlying assumptions (Conant, Mokwa, & Varadarajan, 1990; Desarbo, Benedetto, Song, & Sinha, 2005; Shortell & Zajac, 1990). The methodology for identification of strategic types is one such area that needs more explanation especially when archived financial data is used.

The purpose of the study is to prepare a base line for strategy-performance relationship using different typologies, especially Miles and Snow typology, and to investigate the impact of contingent factors on this relationship. For this to achieve, it is important to: develop a step-by-step methodological framework to categorize the strategic orientation of the firms; to compare the strategic consistency of the firms over time; and, to identify the reactor strategy. Options for data analysis and testing of hypotheses are also proposed.

The remaining part is divided in to two: part one refers to the summary of the empirical research on Miles and Snow typology and conceptual and theoretical development of scoring methodology; and part two presents the step-by-step procedure of research framework using scoring methodology for identification of strategic types of the firms.

Part A:***Empirical Literature Summary***

The applicability of Miles and Snow typology is widespread which is evidenced from the literature as the research is done in many industries investigating a number of measures and relationships. However, the mainstream research is mostly in developed countries leaving room for research in developing countries. Since the political, economic, socio-cultural, technological, environmental and legal contexts are different for developed and developing countries, the outcome may also be different.

The argument of Miles and Snow that three viable strategies are likely to be distributed equally in an industry is not overwhelmingly supported. The presence of all strategic types are found where classification of strategic types is based on self-typing, questionnaire, or expert opinion data (Blackmore & Nesbitt, 2012; Conant et al., 1990; Daniel Rajaratnam & Chonko, 1995; Desarbo et al., 2005; Jennings et al., 2003; Mcdaniel & Kolari, 1987b; Olson et al., 2005; Shortell & Zajac, 1990; Slater et al., 2011; Smith et al., 1986, 1989; Snow & Hrebiniak, 1980). In all these instances the respondents are bound to classify the firm in one of the four strategic types. The researchers who used archived data, and classify firms according to ranking or scoring methods, usually capture three types (defenders and prospectors at the extreme and analyzers as the balancing strategy) ignoring the reactor strategy (Evans & Green, 2000; Hambrick, 1981, 1982, 1983; Liang, Musteen, & Datta, 2009; Sarac, Ertan, & Yucel, 2014; Thomas & Ramaswamy, 1996). The percentage of prospectors and defenders is usually less than the analyzers in most of the strategies. This may be because of neutralized response where perceived data is collected and because of the subjective cut points when ranking techniques are used by the researchers.

For identification of strategic types self typing approach, cluster analysis, and scoring methods are used. The archival data is used to measure the realized strategy while other data collection methods such as self-typing approach, standardized questionnaires, and interviews are used to measure the perceived strategy. In scoring methods, particularly when archived financial data is used, ranking techniques (quintiles, percentiles, scoring etc) are used. But there is no standardized method of identifying strategic

types as the different researchers used different steps to categorize the strategic types. Another deficiency of scoring method, when used for archival data, is the identification of only two strategic types (prospectors and defenders) representing the extreme ends of the continuum while analyzers are automatically chosen as the balancing strategy.

The proxies used for measuring strategy are targeted to find; the marketing and R&D focus; growth and production capability; capital intensity; cost efficiency; and diversification of the firms. For financial performance measures ROA, ROE, ROS, and growth rates are used most of the time. Other financial performance measures include Return on Capital Employed (ROCE), Cash Flow on Investment (CFOI), EPS, and annual stock return etc whereas customer satisfaction and service quality are used as non-financial performance measures (Bentley, Omer, & Sharp, 2013; Blackmore & Nesbitt, 2012; D. Ittner, Larcker, & Rajan, 1997; Evans & Green, 2000; Hambrick, 1983; Lin, Tsai, & Wu, 2014; Sarac et al., 2014; Thomas & Ramaswamy, 1996).

Conceptual and Theoretical Development for Scoring Method

In scoring method the strategic variables are ranked based on quintiles or percentiles. The composite scores are used for final categorization of strategic type of an organization. But the problem with this method is that different researchers used different steps to categorize the strategic types. As Conant et al. (1990), pointed out that one of the limitations is to identify only two strategy types, the defenders and prospectors at the end points and putting analyzers in the middle. Another area of interest is to extend the three viable strategic types from three to five by differentiating pure defenders, analyzers, and prospectors from those firms that lie between defenders and analyzers or between prospectors and analyzers on the continuum. Although these concepts have been discussed before but no concrete effort has been made to develop a standard for such classification. For example, Hambrick, (1981; 1983), introduced the terms “pure defenders/prospectors” and “extreme defender/prospector” to distinguish the strategic types and emphasized that it would be more accurate to label firm which lags its industry in new product sales as “defender-like” and as “prospector-like” the firm which surpasses its industry in new product sales. He suggested that for ideal strategy measure, it would be preferable to have multiple indicators for

identifying defenders and prospectors. Although, there are instances where different terms such as pure defenders/prospectors and mixed strategies (Valos & Mavando, 2003) and low-cost defenders and differentiated defenders (Slater et al., 2011) are used but we found no subsequent research which categorizes the strategies in this way.

To address these issues, average data for strategy measures is used to calculate the composite ranking scores. The highest quintiles are given a score of 4; those in the second highest quintile are given a score of 3, and so on, while those observations in the lowest quintiles are given a score of 0. The reverse ranking is calculated for variable where defenders are expected to score more than prospectors. The scores are summed over the four measures in such a way that a company could receive a maximum score of 16 and a minimum score of 0. The discrete “Strategy” score ranges along a continuum in value from 0 to 16 with defender and prospector firms closer to the endpoints and rest of the companies constituting the middle of the continuum, consistent with organizational theory (Bentley et al., 2013; Evans & Green, 2000; Hambrick, 1981, 1983; Miles et al., 1978; Segav, 1989; Smith et al., 1989). Specifically, with in scores, the strategy types are categorized as: Pure Defenders (0–3); DA-Like (4-6); Pure Analyzers (7-9); PA-Like (10-11); and Pure Prospectors (13–16). Since, Reactors are those firms which have inconsistent behavior; they can be identified by looking at the behavior of data at different points in time. For this purpose, the strategic orientation scores are calculated at four points in time. Scores for overall 7 year average data are calculated to know the realized strategy of each firm for the whole duration.

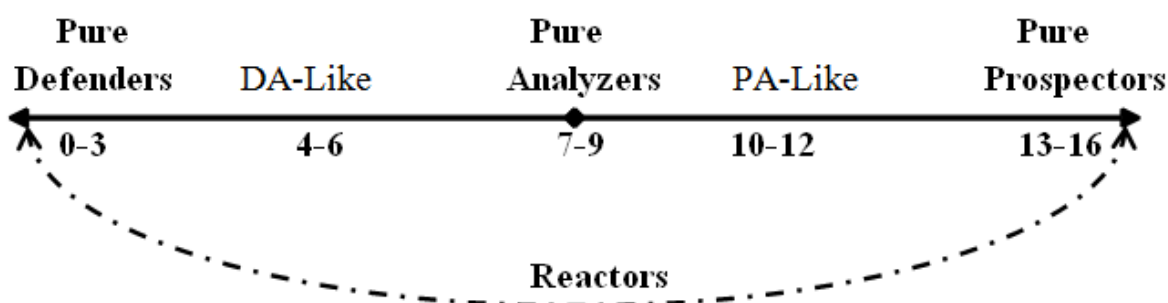


Figure 1: Strategy continuum and reactor domain

To see the consistency over time, three strategy scores for the years 2011, 2012, and 2013 are calculated

by taking preceding five years averages. The resultant strategic orientation of each firms at 4 points are compared. The final selection is based on the rule that for strategy to be considered as viable, it must occur at least three times out of four otherwise it was treated as reactor. Since, reactors behave inconsistently; they can be from within other strategic types as depicted in figure (**Figure 1**).

The range of groups, other than pure prospectors and pure defenders, is kept equal while the range of score for pure defenders and prospectors (extreme ends) is high because of the fact that very few organizations receive score near to extreme ends.

Part B:

Step-by-Step Process to Calculate the Strategy Types using SAS Codes

The following sections present a step-by-step procedure using a self generated raw panel data to explain the coding steps, procedures, and the outcomes to facilitate the researchers how to identify the strategic orientation of firms from a given data set of their interest. The software used for this purpose is SAS –a statistical analysis software used in many fields of research. SAS can read data files created by other statistical packages such as data files created by SPSS®, Excel®, Minitab®, Stata®, Systat, and others to be incorporated into a SAS program. SAS is versatile and powerful enough to meet researchers' needs in data analyses. It is flexible, with a variety of input and output formats and numerous procedures for descriptive, inferential, and forecasting of statistical analyses. It includes a wide range of analysis procedures to help researchers navigate through data so (SAS Inc, 2015).

a) SAS Data Set

A data set is prepared for the step-by-step procedure and explanation. The 7 years data contains the information of 18 firms from 5 industries with four strategy variables, assets for measuring size, and one performance variable. The composite score calculated through the steps explained below for strategy variables (V1, V2, V3, and V4) treated as independent variable. Sector and size are considered as contingent variables and ROA as dependent variable. The purpose of the study is to prepare a base line for strategy-performance relationship using different typologies, especially Miles and Snow typology, and to investigate the impact of contingent factors on this relationship. The following code generates the data set

for this exercise:

```

Data test.practice;

      input Sector Firms Years  V1  V2  V3  V4  Asset  ROA;

Datalines;

1 1  2008  12  23  45  30  200  0.09

1 1  2009  11  22  50  31  225  0.21

1 1  2010  11  25  33  32  250  0.08

1 1  2011  10  30  45  33  250  0.17

1 1  2012  12  27  34  34  245  0.22

1 1  2013  12  30  40  35  252  0.09

1 1  2014  13  33  45  36  250  0.25

1 2  2008  32  45  21  37  155  0.21

.....

.....

5 3  2011  24  27  25  104 120  0.2

5 3  2012  24  25  30  105 100  0.24

5 3  2013  34  35  25  106 130  0.26

5 3  2014  12  24  24  107 125  0.1

;

Run;

```

b) Average Calculation

The researchers use averages (simple or moving/rolling) to calculate proxies for strategic types and to smooth the variations of a time series data due to seasonal or other variations. For moving/rolling averages, one of the most suitable SAS procedures is PROC EXPAND (Premal P. Vora, 2008). Following code can be used to calculate the 5 years rolling averages, for non-missing values:

****Program for Calculating Rolling (Moving Averages)****

Proc Expand data=test.practice out=test.ma;

convert v1 =v1ma/transformin=(setmiss 0) transformout=(movave 5);

convert v2 =v2ma/transformin=(setmiss 0) transformout=(movave 5);

.....;

convert roa =roama/transformin=(setmiss 0) transformout=(movave 5);

By sector firms;

Run;

The “By” clause is added to calculate the rolling averages within industry of firms. If there is an even number of years then centered moving average is used. For this, the key word “movave” is replaced by “cmovave”. For our purpose, following PROC SQL code is used to calculate the simple averages, rounded off to 2 decimal points, for each firm within an industry.

Calculation of Simple Averages

Proc SQL;

Create Table test.avg as

Select Sector, firms,

round(mean(v1), 0.001) as V1, round(mean(v2), 0.001) as V2,

round(mean(v3), 0.001) as V3, round(mean(v4), 0.001) as V4,

round(mean(asset), 0.001) as Asset, round(mean(ROA), 0.001) as ROA

From test.practice

Group by sector, firms;

Quit;

c) Rank Calculation

The ranking is done based on the theoretical foundations for each selected variable. For example, in our raw data set variables: V1, V2, V3, and V4 refer to the variables selected for measuring strategic

orientation. As evidenced from the previous research, it is supposed that prospectors score high for V1, V2, and V3 and low score for V4. Therefore, reverse ranking will be calculated for V4. PROC RANK procedure of SAS (Bilenas, Morgan, & Bank, 2009) facilitates to rank variables according to their demand. The following code generate ranking and reverse ranking. For this purpose, quintiles are used to divide the data into five bins. The coding for within sector scores and scores for ranking is given below:

Program for Data Sorting, Calculating Ranks and Reverse Ranks, and Merging of Files

```

Proc Sort Data=test.avg;
  By sector firms;
Run;
Proc Rank data=test.avg Out=quantiles Groups=5;
  By sector; Var V1 V2 V3; Ranks R1 R2 R3;
Run;
Proc Rank Data=test.avg out=quantiles1 Descending Groups=5;
  By sector; Var V4; Ranks R4;
Run;
Proc Rank Data=test.avg out=quantiles2 Groups=3;
  Var asset; Ranks RA;
Run;
Proc SQL;
  Create Table size as select RA as Size from quantiles2;
Quit;
Proc SQL;
  Create Table merge as Select a.sector, a.firms, a.v1, a.v2, a.v3, b.v4, a.asset,a.roa, a.r1,a.r2,a.r3,b.r4,
  a.r1+a.r2+a.r3+b.r4 as Strategy
  From quantiles a, quantiles1 b
  Where a.sector=b.sector and a.firms=b.firms;
Quit;
Data test.main;
  Merge test.merge size;

Run;
    
```

The above codes sort the data in ascending order. The firms are sorted within sectors. The next step is to calculate, within sectors, the ranking of first three strategy variables in ascending order. This is done for standardization of scores across the four strategy variables. The ranking is done for size calculation as

well. The last two steps are used to merge the required information in one table.

The ranking is calculated keeping in view the firm's standing in comparison to its industry. For calculating the ranking of a firm in comparison to the overall economy, the "by sector" clause from the above codes is to be removed. It is an important point for researchers to note the differences in results and hence in its implications.

d) Categorization of firms

The next step is to categorize the firms according to their strategic orientation and according to the size of the firm. The following codes accomplish this task:

Program for Categorization of Firms

```

Data test.strategy;
  Set test.Main;
  If strategy>=13 then Orientation="Prospectors";
    Else if strategy<=3 then Orientation="Defenders";
    Else if strategy in (4 5 6) then Orientation="DA-Like";
    Else if strategy in (7 8 9) then Orientation="Analyzers";
  Else Orientation="PA-Like";
If Size=0 then Sz='Small ';
  Else if size=1 then Sz='Medium';
  Else Sz="Large ";
Run;
Proc sort data=test.main1;
  By sector firms;
Run;

```

The outcome of the codes written in sections "b", "c" and "d" above, produce the data set having averaged values for strategy and performance variables, ranking for strategy variables and for assets, total score of strategy variables and categorization of the firms according to respective strategic type and size are presented below (**Table 3**).

Table 3: Variables, ranking, total score, and classification of Strategic types and size of the firms

Observations	Sector	Firms	V1	V2	V3	V4	Asset	ROA	R1	R2	R3	R4	Total Score	Asset Rank	Strategy	Size
1	1	1	11.571	27.143	41.714	33.000	238.857	0.159	1	1	2	3	7	2	Analyzers	Large
2	1	2	39.143	43.286	21.571	40.000	138.286	0.293	3	3	1	1	8	1	Analyzers	Medium
3	1	3	36.000	39.429	47.286	37.286	133.857	0.276	2	2	3	2	9	1	Analyzers	Medium
4	2	1	26.000	50.000	35.000	37.000	142.143	0.149	3	3	3	2	11	2	PA-Like	Large
5	2	2	19.000	30.143	23.857	41.571	132.429	0.184	1	2	1	1	5	1	DA-Like	Medium
6	2	3	25.429	29.714	26.714	33.000	145.000	0.224	2	1	2	3	8	2	Analyzers	Large
7	3	1	23.286	34.286	25.571	38.143	129.143	0.203	1	1	0	3	5	1	DA-Like	Medium
8	3	2	30.286	36.857	27.571	34.000	124.429	0.246	3	3	2	4	12	1	PA-Like	Medium
9	3	3	30.286	33.000	27.286	41.000	123.714	0.244	3	0	2	2	7	0	Analyzers	Small
10	3	4	68.857	60.143	54.857	48.000	115.571	0.203	4	4	4	2	14	0	Prospectors	Small
11	3	5	23.857	36.857	29.857	55.000	124.429	0.246	2	3	3	1	9	1	Analyzers	Medium
12	3	6	18.143	36.429	26.429	62.000	123.714	0.244	0	2	1	0	3	0	Defenders	Small
13	4	1	25.143	48.000	51.000	69.000	267.571	0.159	1	3	3	3	10	2	PA-Like	Large
14	4	2	40.143	40.429	24.429	76.000	138.286	0.293	3	1	1	2	7	1	Analyzers	Medium
15	4	3	36.000	42.143	49.714	83.000	133.857	0.276	2	2	2	1	7	1	Analyzers	Medium
16	5	1	21.429	50.714	33.857	90.000	142.143	0.149	2	3	3	3	11	2	PA-Like	Large
17	5	2	19.000	30.143	22.143	97.000	107.429	0.184	1	2	1	2	6	0	DA-Like	Small
18	5	3	25.429	29.714	26.571	104.00	114.286	0.224	3	1	2	1	7	0	Analyzers	Small

V1...V4 are averages of strategy variables and R1...R4 are ranks for V1...V4 respectively

e) Comparison of Strategies over time and identification of Reactor Strategy

Zahra Shaker A. & Pearce (1990), urged the researchers to study the strategic change and transitional characteristics of strategic types over the time as studying shifts among strategic types in this way will make it possible to examine parallel changes in strategic process. Specifically, to check: are there

predictable paths of strategic change (e.g. a defender becomes analyzer); and is a certain strategic transition is more conducive than others to effective firm performance? Another important question is the identification of reactor strategy using archival data. According to Miles and Snow (1978), reactors respond to the challenges of the adaptive cycle in uneven and transient ways; they tend to be short-term oriented and environmentally dependent. Conant et al. (1990) labeled reactors as 'less stable' and 'inconsistent'. Reactors are unassertive and varied in strategic orientation and consistently inconsistent behavior pattern. Blackmore & Nesbitt (2012), asserted that reactors could exhibit the behavioral characteristics of defenders, analyzers and prospectors.

Table 4: Strategic Orientations of the firms over time

Obs	Sector	Firms	Strategic Orientation Over Time				Final Grading*
			Strategy at Time 1	Strategy at Time 2	Strategy at Time 3	Strategy Overall	
1	1	1	Analyzers	Analyzers	Analyzers	Analyzers	Analyzers
2	1	2	Analyzers	Analyzers	Analyzers	Analyzers	Analyzers
3	1	3	PA-Like+	Analyzers	Analyzers	Analyzers	Analyzers
4	2	1	PA-Like	PA-Like	PA-Like	PA-Like	PA-Like
5	2	2	DA-Like+	DA-Like	DA-Like	DA-Like	DA-Like
6	2	3	Analyzers	PA-Like	Analyzers	Analyzers	Analyzers
7	3	1	DA-Like	Analyzers	Analyzers	DA-Like	Reactor
8	3	2	PA-Like	PA-Like	PA-Like	PA-Like	PA-Like
9	3	3	Analyzers	DA-Like	Analyzers	Analyzers	Analyzers
10	3	4	Prospectors	Prospectors	Prospectors	Prospectors	Prospectors
11	3	5	DA-Like	Analyzers	Analyzers	Analyzers	Analyzers
12	3	6	DA-Like	Defenders	Defenders	Defenders	Defenders
13	4	1	Analyzers	PA-Like	Analyzers	PA-Like	Reactors
14	4	2	DA-Like	Analyzers	Analyzers	Analyzers	Analyzers
15	4	3	Analyzers	Analyzers	Analyzers	Analyzers	Analyzers

Obs	Sector	Firms	Strategic Orientation Over Time				Final Grading*
			Strategy at Time 1	Strategy at Time 2	Strategy at Time 3	Strategy Overall	
16	5	1	PA-Like	PA-Like	PA-Like	PA-Like	PA-Like
17	5	2	DA-Like	DA-Like	DA-Like	DA-Like	DA-Like
18	5	3	Analyzers	Analyzers	Analyzers	Analyzers	Analyzers

*Final grading is based on the rule as: a strategic type is considered final if it occurs at least 3 out of 4 times; else “Reactors”

+PA-Like=Prospector-Analyzers-Like, DA-Like=Defender Analyzers Like

To answer the above important questions, and for identification of the reactor strategy coding is done to find strategic orientation of the firms over the time. It is assumed that 3-to-5 years are sufficient time period for any strategy to mature. Five years average data is used to find the strategic orientation and marginal effect at year 2012, 2013, and 2014. The output is presented in **Table 4**. The identification of the reactor strategy is also possible by monitoring the movement of strategic orientation over time. For example, a strategy type is considered as final if it occurs at least three times out of four. Otherwise, the firm is considered as reactor firm (see observation number 7 and 13). The firms at serial number 1, 2, 4, 5, 10, 15, and 18 have the most consistent strategic approach.

f) Data Analysis

Once the identification is completed, the analysis such as descriptive statistics, cross-tabulation, analysis of variance, correlation, and regression analysis can be done by applying a number of SAS procedures. The commonly used procedures for this purpose are: PROC SUMMARY; PROC MEANS; PROC UNIVARIATE; PROC FREQ; PROC GLM; PROC REG; PROC Logistics; and PROC CATMOD (Kleinman & Horton, 2010).

Conclusion

The paper presented, in first part, a brief overview of empirical research on Miles and Snow typology to identify the insights about the application diversity, distribution of strategic types in industries,

methodologies applied, and list of strategy and performance measures. One of the findings is that the scoring methodology presents a sketchy picture lacking clear explanation and documentation. The second part of this paper presents a step-by-step procedure with examples to explain the scoring methodology for identification of strategic types including reactor strategy. The consistency of the strategic orientation over time is also checked. The specific contribution of the study include: a framework where three viable strategic types are extended to five strategic types as pure defenders, DA-Like, pure analyzers, PA-Like and pure prospectors; codes are developed to facilitate the researchers in preparation of dataset for multidimensional analysis; strategic types were identified at 3 points in time and then compared it with overall averaged data is an important aspect of the study to check the consistency of the strategic orientation over time; and the identification of the reactor strategy when archived financial data is used.

Further analysis including descriptive statistics, cross-tabulation, ANOVA, and regression etc can easily be done through the use of powerful SAS procedures or by using any other software of their choice as SAS has the facility of importing and exporting data into the number of other formats. The methodology presented here can be used in similar situations where groupings or typologies are to be categorized in business strategy or in any other field of study.

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EXPLORING THE LINK BETWEEN INTELLECTUAL CAPITAL AND PERCEIVED ORGANIZATIONAL PERFORMANCE

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Abstract

The role that intellectual capital plays in organizational performance and in gaining sustainable competitive advantage cannot be ignored by organizations. Intellectual capital is considered an asset, and can broadly be termed as the collection of all informational resources a company has at its disposal that can be used to drive profits, gain new customers, create new products, or otherwise improve the business. This study explored the link between intellectual capital and perceived organizational performance in Dana Group of Companies, Lagos. The objectives of this research work were to determine the association between human capital and perceived organizational performance and the relationship between customer capital and perceived organizational performance. It is also aimed at ascertaining the nexus between structural capital and perceived organizational performance as well as the connection between innovation capital and organizational performance.

The study employed survey research. Primary data was used for the study with questionnaires as research instruments. The subjects of the study were one hundred and forty nine employees of Dana Group of Companies, Lagos. The participants for this study were selected using stratified random technique. The hypotheses formulated for the study were tested using Pearson's Correlation.

Findings from this study revealed a significant relationship between human capital and organizational performance with $r = .327^{**}$, $N= 149$, $P < .01$. The research indicated a significant a significant relationship between customer capital and organizational performance with $r = .321^{**}$, $N= 149$, $P < .01$. The study also showed a significant relationship between structural capital and organizational performance with $r = .321^{**}$, $N= 149$, $P < .01$. The results of the study indicated a significant relationship between innovation capital and organizational performance with $r = .321^{**}$, $N= 149$, $P < .01$.

The study concluded and recommended that efforts should be made by organizations to put in place a robust intellectual capital platform that can bring about superior performance and sustainable competitive advantage.

Keywords: Intellectual capital, human capital, customer capital, structural capital, innovation capital, organizational performance.

Introduction

Intellectual capital is a combination of individual knowledge and capabilities that can result in the creation of value and wealth as well as a type of organizational capital that includes human relation (common values and philosophy of management) and commercial assets (commercial signs and royalty) (Lu and Hung, 2011). Intellectual capital as a kind of knowledge that companies use to gain competitive advantage (Li et al, 2010) is the key resource and key stimulant of organizational performance in order to create value. This value can be obtained through innovation, increased productivity, reducing cost and customer loyalty (Kim et al, 2011).

Some reasons for importance of intellectual capital that can be referred to are as follows: the need to skilled and expert, the importance of customer value and attention to concepts such as learning and innovation in new economy (Ienciu et al, 2011). Therefore the progress in new economy emphasizes this fact that creating more value rely on intangible assets. Intellectual capital is considered as the main resource for economic expansion and key factor for promoting organizational performance (Shojaie and Baghbaniyan, 2009) and as a result nowadays efficiency and performance of organizations rely on efficient management of intellectual capital (Ramezan, 2011). In the knowledge-based economy, the most successful organizations will be those who use their intellectual capital in the most effective ways to improve performance.

In modern economic perspectives, effective knowledge management determines organizational outcomes, organizational performance and sustainable competitive advantage(Ogunsiji and Akanbi,2013). This system shares opinion that conventional capitals such as natural resources, financial resources, and other tangible assets resources are meaningless without knowledge-base and technological base capital. The implementation of knowledge-base and technological base capital in a company will accelerate the efficiency and effectiveness of the implementation of other resources, so that they will lead to the competitive advantage of the company. According to resource-based theory, the intellectual capital (IC) is a main source to improve business performance (Roos et al., 1997). Therefore, intellectual capital has been studied by many past researchers (Amir and Lev, 1996; Bontis, 2001; Edvinsson and Malone, 1997; Ittner and Larcker, 1998; Stewart, 1997; Wang and Chang, 2005), who investigate the influence of intellectual capital on business performance. This study therefore investigates the connection between intellectual capital and perceived organizational performance in Dana Group of Companies, Lagos.

Objectives of the Study

This study is broadly targeted at the relationship between intellectual capital and perceived organizational performance. There are four objectives that this study intends to achieve. They are:

1. To explore the link between human capital and perceived organizational performance.
2. To determine the relationship between customer capital and perceived organizational performance.

3. To examine the connection between structural capital and perceived organizational performance.
4. To ascertain the link between innovation capital and perceived organizational performance.

Hypotheses of the Study

In line with the objectives of the study, the following hypotheses are tested in this study.

1. There is a significant relationship between human capital and perceived organizational performance.
2. There is a significant relationship between customer capital and perceived organizational performance.
3. There is a significant relationship between structural capital and perceived organizational performance.
4. There is a significant relationship between innovation capital and perceived organizational performance.

Literature Review

Ling (2011) confirmed that intellectual capital does enhance a firm's global initiatives, and intellectual capital complementarities have positive impact on a firm's global initiatives (global innovation and global marketing) in both high and low dynamic context. Gabriela et al. (2012) were of the opinion that intellectual capital consists of stocks and flows of knowledge available in an organization. Intellectual capitals are intellectual materials that can be captured as assets, such as knowledge, information, intellectual property, and employees' experiences, commitments or capabilities (Barney, 2002). Although intellectual capital has been viewed as a key determinant of business performance, relatively little is known about how dimensions of intellectual capital individually and compositely affect a firm's performance (Tovstiga and Tulugurova, 2007). Hsu (2006) suggested that intellectual capital dimensions such as human capital, innovation capital and structural capital are important and act as integral knowledge in an organization. However, there is no consistency as to the types of capitals to include as dimensions of intellectual capital. Some studies examined dimensions from a classification and conceptual models perspective (Bontis, 1999, 2002; Van Buren, 1999; Pike, Rylander and Roos, 2002), while others measured dimensions of intellectual capital using accounting, financial and disclosure methods (Kamath, 2007; Mavridis, 2004). Thus, there is a need to study more closely the specific dimensions of intellectual capital that are crucial to the firm performance.

Typically most firms have three forms of IC embedded in their people, structures, and customers. These are human capital, structural capital, and relational capital (Stewart, 2001; Grace, 2006; Curado and Bontis, 2007; De Castro and Saez, 2008; Hsu and Fang, 2009). Human capital is the knowledge, skills, experience, intuition, and attitudes of the workforce (Stewart, 1997), and can be enhanced by increasing the capacity of each worker (Teo, 1998). Structural capital has to do with patents, copyrights, and information-age assets such as data bases and software. These are organizational and technological elements that pursue integration and coordination within the firm (De Castro and Saez, 2008). Relational

capital refers to the value of a firm's relationships with the people with whom it does business. It is the likelihood that these people will keep doing business with the firm (Stewart, 1997; Edvinsson and Malone, 1997). Firms with more human, relational and structural capital should be able to better enact their environment as well as respond and adapt to environmental changes (Gold, Malhotra and Segars, 2001).

The dimension of relational capital is based on the idea that organizations are conceptualised not to be isolated systems but as systems that are, to a great extent, dependent on their relations with their environment. Thus, this type of capital includes the value generated by relationships not only with customers, suppliers or shareholders, but with all stakeholders, both internal and external (Hormiga and Batista-Canino, 2010). The relationships of this type that contribute value to the firm are regarded as relational capital; the knowledge embedded in the relationships established with the outside environment and inter organization (Bontis, 1997, Edvinsson, and Sullivan, 1996). Relationships in the organizations can be viewed as social relationships (between individual, which can be professional or nonprofessional) and inter organizational relationships.

This study is anchored on the theories of Knowledge-based View (KBV) and Resource-based View (RBV) of the firm which are important theories or perspectives in Strategic Management. KBV of the firm addresses the issues of the existence, the boundaries, and the internal organization of the multi-person firm (Foss, 1996). The starting point is that knowledge is the key explanatory factor, and the nature of knowledge is an important determinant enhancing understanding of firm organization and behaviour (Foss, 2005). The RBV states that a firm develops competitive advantage by not only acquiring but also developing, combining, and effectively deploying its *physical, human, and organizational* resources in ways that add unique value and are difficult for competitors to imitate (Barney, 1991). Most resource-based arguments are rooted in human resources. The RBV is mainly interested in identifying the essential productive (knowledge) resources and examining how these resources can be acquired, protected, and valued (Spender, 1996b). It is based on the cognitivist perspective on knowledge that assumes knowledge can be managed with tight procedures, policies, and defined action (Von Krogh, 1998). The KBV, in contrast, is based on the constructionist view of knowledge, which assumes that knowledge cannot be completely controlled but can only be managed by creating enabling conditions (Von Krogh, 1998), and focuses on how knowledge resources are utilized and coordinated (Spender, 1996b).

Methodology

Research Design

The design for this study is a survey design with intellectual capital as independent variable which was measured by human capital, customer capital, structural capital and innovation capital and perceived organizational performance as dependent variable.

Subjects

The respondents of this study were one hundred and forty-nine employees of Dana Group of Companies, Lagos consisting of one hundred and one males and forty eight females with age from eighteen years to fifty-five years.

Instruments

The instrument for this study is a questionnaire which was divided into three parts. Section A contains demographic information of the respondents which includes age, sex, marital status, educational qualification. Section B dealt with scale on intellectual capital. Intellectual capital identifies four dimensions: customer capital (16 items), human capital (15 items), structural capital (16 items), and innovation capital (5 items). The scale was developed by Bontis (1997) using a Likert scoring format ranging from strongly agree(7) to strongly disagree(1). The scale had a composite reliability Cronbach alpha value of 0.85. Section C measured perceived organizational performance. The organizational performance scale was adapted from a scale developed by Khandwalla (1977) and David et. al (2002) which is an eighth item scale with a Likert scoring format ranging from very high (6) to very low (1). The scale had a reliability Cronbach alpha value of 0.87. The scales were revalidated and the Cronbach alpha gave the following results: human capital -0.96, customer capital -0.94, structural capital -0.94, innovation capital -0.78 and perceived organizational performance-0.87.

Data Analysis

The demographic information was analysed using frequency counts and simple percentage. Hypotheses 1 to 4 were analysed using Pearson’s Correlation.

Results and Discussions

Hypotheses Testing

This section focused on the testing of the hypotheses formulated for the study.

Hypothesis 1

H1: There is a significant relationship between human capital and perceived organizational performance.

Table 1: Pearson’s Correlation between Human Capital and Perceived Organizational Performance

Variable	Mean	Std. Dev.	N	R	P	Remark
Human capital	6.254139	.6955616	149	.910**	.000	Sig
Perceived Organizational performance	6.23909	.601577				

** Sig. at .01 levels

It is shown in Table 1 that there is a significant relationship between human capital and perceived organizational performance ($r = .910^{**}$, $N = 149$, $P < .01$). The implication of this result is that a 1% shift in human capital will cause a 91% shift in perceived organizational performance. Hence, it could be deduced that human capital is positively related to perceived organizational performance in the study.

Hypothesis 2

H2: There is a significant relationship between customer capital and perceived organizational performance.

Table 2: Pearson’s Correlation between Customer Capital and Perceived Organizational Performance

Variable	Mean	Std. Dev.	N	R	P	Remark
Customer capital	6.226930	.6110931	149	.989**	.000	Sig
Perceived Organizational performance.	6.23909	.601577				

** Sig. at .01 levels

It is shown in Table 2 that there is a significant relationship between customer capital and perceived organizational performance ($r = .989^{**}$, $N = 149$, $P < .01$). The implication of this result is that a 1% shift in customer capital will cause a 98% shift in perceived organizational performance. Hence, it could be deduced that customer capital is positively correlated with perceived organizational performance in the study.

Hypothesis 3

H3: There is a significant relationship between structural capital and perceived organizational performance.

Table 3: Pearson’s Correlation between Structural Capital and Perceived Organizational Performance

Variable	Mean	Std. Dev.	N	R	P	Remark
Structural Capital	6.234480	.6057816	149	.997**	.000	Sig
Perceived Organizational performance.	6.23909	.601577				

** Sig. at .01 levels

It is shown Table 3 that there is a significant relationship between structural capital and perceived organizational performance ($r = .99^{**}$, $N = 149$, $P < .01$). The implication of this result is that a 1% shift in structural capital will cause a 99% shift in perceived organizational performance. Hence, it could be deduced that structural capital is positively and strongly associated with perceived organizational performance in the study.

Hypothesis 4

H4: There is a significant relationship between innovation capital and perceived organizational performance.

Table 4: Pearson’s Correlation between Innovation Capital and Perceived Organizational Performance

Variable	Mean	Std. Dev.	N	R	P	Remark
Innovation capital	6.240	.6256	149	.977**	.000	Sig
Perceived Organizational performance.	6.23909	.601577				

** Sig. at .01 levels

It is shown in Table 4 that there is a significant relationship between innovation capital and perceived organizational performance ($r = .977^{**}$, $N = 149$, $P < .01$). The implication of this result is that a 1% shift in innovation capital will cause a 98% shift in perceived organizational performance. Hence, it could be deduced that innovation capital is positively and strongly connected with perceived organizational performance in the study.

Concluding Remarks

This study has investigated the causal relationship between intellectual capital and perceived organizational performance of employees in Dana Group of Companies, Lagos, Nigeria. This research concludes that intellectual capital is strongly associated with perceived organizational performance. The study indicated strong and positive significant relationship between the dimensions of intellectual capital and perceived organizational performance. These results aligned with earlier studies (Amir and Lev, 1996; Bontis, 2001; Edvinsson and Malone, 1997; Ittner and Larcker, 1998; Stewart, 1997; Wang and Chang, 2005; Shojaie and Baghbaniyan, 2009; Ramezan, 2011;). It is concluded that improvements in intellectual capital lead to improvements in organizational performance. Based on the findings from this study it is concluded and recommended that efforts should be made by organizations to put in place a robust intellectual capital platform that can bring about superior performance and sustainable competitive advantage. It is also proposed that efficient intellectual capital management can result in high level of motivation and dedication in employees, larger market share as well as leading place in the market place.

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MASSIVELY SCALABLE PARALLEL NEURAL NETWORKS: A BIG DATA EXPERIMENT

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Abstract

As the cost of computer hardware goes down, the efficiency of processors and secondary storage continues to increase at a rapid pace. These conditions have led us to storing huge amounts of data, which is sometimes referred to as Big Data. The Neural Network (NN) has been shown in the past as a capable tool for prediction. However, operating in serial on such huge data sets is cumbersome and time consuming.

In this research, a parallelized NN that uses a modified genetic algorithm known as Neural Network Simultaneous Optimization Algorithm (NNSOA) is shown to significantly speed up the training process. Past research has shown that the NNSOA was well suited for parallelizing the NN training process on computer generated data (McMurtrey, 2013). This research extends the experiment to real-world data for validity.

1. Introduction

Feed forward neural networks have been used as universal approximators for over fifty years (McCulloch & Pitts, 1943). Examples can be easily found and are numerous that range from predicting

breast cancer to bankruptcy. The majority of NNs in operation today uses some form of back-propagation (BP) algorithm for training (Fausett, 1994). The BP algorithm has done quite well for finding adequate solutions, but its limitations are well known (Seiffert, 2004, Sexton et al, 1998). An additional limitation to BP is its effectiveness when used in a parallel environment (Long & Gupta, 2005, Seiffert, 2004).

This research uses NNSOA as the search technique, which overcomes all of these limitations (Sexton et al, 2006, Sexton et al, 2005, Sexton et al, 2003, Sexton et al, 1998). No matter what we are predicting today, our technology drives us to be able to handle terabytes of data in a short amount of time to gain competitive advantage.

The Neural Network Simultaneous Optimization Algorithm (NNSOA) differs from BP in that it is not a gradient descent algorithm. This provides a greater search of the error surface allowing it to find solutions that usually generalize better than networks trained using gradient descent methods (such as BP). The NNSOA does not depend on the backward propagation of errors and better lends itself to parallel implementations as it reduces the communication overhead during training (Sexton et al, 1998). As discussed by Seiffert (2004), this communication and processing overhead isn't a function of the neural network topology, but is instead a function of the training algorithm used.

The goal of this research is to show the parallelized NNSOA not only speeds up the training process, but also gives us superior solutions using real world data. This research builds on previous research (McMurtrey, 2013, Seiffert, 2004, Sexton et al, 2006, Sexton et al, 2005, Sexton et al, 2003, Sexton et al, 1998) by investigating the effect of parallelizing the NNSOA on real-world data. The specific research

question that this research addressed was: Does the parallel version of the NNSOA obtain better results in a given amount of time than the serial version on a variety of real-world data sets?

2. Algorithm Architecture and Training

The NNSOA is a serial algorithm that uses a modified genetic algorithm to train the neural network (NN), optimize the architecture, and identify the inputs that are contributing to the solution (Sexton et al, 2003, Sexton et al, 2005, Sexton et al, 2004, Sexton et al, 1998). Although the NNSOA has been found in past research to outperform the most commonly used NN search technique, back propagation (BP), limitations still occur when applied to complex and/or large data sets. Gradient search techniques, such as BP, have well-known limitations when applied to complex nonlinear optimization problems that often result in inconsistent and unpredictable performance (Rumelhart et al, 1986, Prechelt, 1996). Because of their gradient nature, BP optimized NNs are required to have non-zero values for every weight. This limitation forces the networks to assign unneeded non-zero weights that, when applied to the training data, offset other inputs that are not contributing to the prediction. This results in the network predicting well with in-sample observations, and predicting poorly with out of sample observations (poor generalization). Although the effects of these unneeded weights are minimized on the training data, when applied to testing data or out-of-sample data, they no longer zero out and add error to the predictions.

Since the NNSOA is not limited in this fashion, it can zero out the unneeded weights and has been shown to generalize to out-of-sample data much better, which is the ultimate goal for the researcher. However, a limitation that still needs to be addressed for the NNSOA is the ability to timely find solutions for large/complex data sets. The NNSOA searches globally as opposed to BP techniques and requires many more calculations to find a solution. Some problem sets are very large with many inputs and/or observations and can take considerable time in achieving a high level of predictive accuracy. Also, some problems may not necessarily be large considering the number of inputs and/or observations, but are so complex in their relationship between inputs and outputs that an exhaustive search (large amount of generations) is required to find a solution. This has limited researchers purely on the basis of time to run the problem set

This research extends prior research that focused on parallelizing the NNSOA, which addressed this limitation and provided not only superior solutions, but did so in a timely manner (McMurtrey, 2013). Since time is a constraint in searching for good NN solutions, especially for large datasets, this research shows that by parallelizing the NNSOA, a NN can now be applied to datasets that were once thought to be too large/complex. In this case, using a NN in a serial manner would usually result in abandonment of the search before an optimal solution was found. Although the significant reduction in time for finding optimal NN solutions was the goal, it should be realized that given the same amount of time to find a NN solution, the parallel version of the NNSOA also found a better solutions than the serial version of the NNSOA. This makes intuitive sense, because the parallel version can run many more generations (or search more exhaustively) than the serial version given a specific time constraint. The hypothesis

tested in this research compared the performance of the parallel version of the algorithm with the serial version of the algorithm using real-world data sets.

Hypothesis to be tested

The hypothesis tested was:

1. *The parallel version of the NNSOA will obtain better results in a given amount of time than the serial version, on a variety of real-world data sets.*

3. Experimental Design

The steps taken to achieve this, discussed further below, using real-world data sets for training and testing that included only relevant inputs as well as data sets that include many irrelevant inputs as error or noise, and then extensive testing and analysis comparing the serial version of the algorithm to the parallel version. We also examined the effect of adding CPUs to the cluster to see if we get a linear or non-linear speedup, and where (if at all) we see the optimal number of CPUs for the given problems. Finally the algorithm was tested with real world data sets that have been used in past research, discussed further below, to benchmark the performance of the parallel NNSOA against other algorithms.

A presentation of the serial NNSOA follows:

- (1) For a single hidden layer feed-forward neural network using the sigmoid activation function at the hidden layer, select an initial parent population of S solutions, $s_i, i = 1, \dots, S$, by drawing random real values from a uniform distribution $[-1,1]$ for input weights $w_{ij}, i = 1, \dots, X$ (number of inputs), $j = 1, \dots, H$ (number of hidden nodes).

This will happen only once during the training process.

(2) Each vector $x = (x_1 \dots x_N)$ where $N =$ the number of observations, is then applied to the current solutions

corresponding w_{ij} , resulting in a dot product for each hidden node. The resulting dot product is then inserted into the sigmoid activation function. The output weights $w_{jk}, j = 1, \dots, H, k = 1, \dots, O$ (number of outputs) are simply the betas that are produced by regressing the values coming out of the activation function for each hidden node, on the actual outputs using Ordinary Least Squares (OLS). If the current model includes an adequate number of hidden nodes, all non-linearity will be accounted for and an additional sigmoid activation function for the output layer is unneeded. By using OLS for finding the output weights, the search process becomes more efficient, only using the NNSOA to search for the input weights.

(3) Equation 1 shows the objective function that will be used in this research for evaluating each solution in the current population.

$$\text{Min } E = \sum_{i=1}^N (O_i - \hat{O}_i)^2 + C \sqrt{\frac{\sum_{i=1}^N (O_i - \hat{O}_i)^2}{N}} \quad (1)$$

Here N is the number of observations in the data set, O is the observed value of the dependent variable, \hat{O} is the NN estimate, and C is the number of non-zero weights in the network. The penalty for keeping an additional weight varies during the search and is equal to the current value of the Root Mean Squared Error (RMSE). This means that the penalty for keeping additional weights is high at the beginning of the training process, however the errors are also high at this point. As the optimization process gets closer to the final solution the errors are decreased and the penalty value becomes smaller. This allows the training process to only eliminate those weights that have little to no effect on the prediction.

(4) Once each member of the current S population is evaluated by the fitness function a probability $P(s_i)$ is assigned

to each solution s_i based on its fitness. This assigned probability is the percent chance that it will be drawn for the next generation. The probability is calculated by dividing the distance of the current string's error from the worst error in the generation by the sum of all distances in the current generation.

$$P(s_i) = \frac{\max(E) - E_{s_i}}{\sum_{i=1}^S (\max(E) - E_{s_i})} \quad (2)$$

Where $\max(E)$ equal to the worst error in the current population S .

- (5) Selecting solutions from the current population based on their assigned probability creates a mating pool of S solutions. This is done by selecting a random number in the range of 0 and the sum of all probabilities (or 1) and comparing it to the cumulative probability of the current string. When it is found that the random value is less than the current string's cumulative probability, the current string is drawn for the next generation. This is repeated until the entire new generation of S solutions is drawn. The S new solutions will likely contain identical solutions from the prior generation, omitting some, and duplicating others.
- (6) The solutions in the mating pool are then randomly paired. A point is randomly selected for each pair (the point will range from 1 to the number of weights in the solution) in which the parent solutions will switch the weights that are preceding that point, generating S new solutions or the next generation. This is referred to as *crossover* in GA terminology. For example, if there were 20 input weights and the random number chosen was 8, then weights 1 through 8 will be switched between them, generating two new solutions.
- (7) For each weight in a generation across all solutions, a random number is drawn, if the random value is less than 0.05, the weight will be replaced by a randomly drawn value in the entire weight space. By doing this, the entire weight space is globally searched enhancing the algorithm's ability to find global solutions or at least the global

valley. This is usually referred to as *mutation*.

- (8) An additional mutation is included in order to eliminate unneeded weights. For each weight in a generation a random number is drawn, if the random value is less than 0.05, the weight will be replaced by a hard zero. By doing this, unnecessary weights in the solutions can be disconnected based on how the error measure changes during evaluation. At this point, the algorithm will loop back to step (2) and repeat a user defined specified number of generations until 70% of those user defined generations has occurred. Once that happens, the algorithm will go to step 9.
- (9) Once 70% of the maximum set of generations has been completed, the best solution so far replaces all the strings in the current generation. The weights of these S identical solutions are then modified by adding/subtracting a small random value to the current weight. These random values decrease to an arbitrarily small number as the number of generations increase to its set maximum amount. This is similar to ES (evolution strategy) and EP (evolutionary programming) strategies and is used for helping the solution to converge upon the global solution.
- (10) The algorithm will terminate on a user specified number of generations.

The algorithm above is currently implemented in a serial fashion. For example, each s_i is plugged into a NN model one at a time and the training data is put through the model to find its specific fitness. This research took this same algorithm and modified the implementation of it so that it can process in parallel instead of serial. For example, each s_i will be assigned to the next available cluster node. If S is equal to 12 and we have 12 cluster nodes available, then we can process all 12 solutions simultaneously.

The parallel version of the NNSOA algorithm is stated below using the same 10 steps but only showing the differences.

- (1) Using a cluster machine of CM machines, $cm_i, i=1, \dots, CM, cm_1$ will perform step one as shown in the serial version. Then it will broadcast the initial S solutions as well as the training data to all remaining cluster nodes using MPI (Message Passing Interface) calls to other cluster members.
- (2) Based on availability of cluster nodes cm_2, \dots, cm_{CM} will be assigned a specific solution (s_i) to plug into the NN model and perform the calculations (OLS) that result in output weights for that solution. This continues until the entire population of S solutions is complete.
- (3) For each cluster node and its assigned solution, it will then evaluate the solution and return the fitness value to the cm_1 machine using MPI calls. Once all fitness values are returned to the main node, the remaining NNSOA steps are completed by cm_1 the main node and the process repeats.

4. Data Description

The original NNSOA with a serial implementation used a set of five real-world problems in past-published research to demonstrate its ability to generalize better than BP. The problems include the Gene, Thyroid, Building, Spam, and Poker problems that can be found on the UCI Machine Learning Repository (<http://archive.ics.uci.edu/ml/>).

1. **Gene:** This dataset consists of 3,175 examples each consisting of 120 inputs and 3 outputs. 25% of the examples represent donors and 25% of the examples represent acceptors. A donor represents an intron/exon

boundary while an acceptor represents an exon/intron boundary. The remaining 50% of the examples represent neither donors, nor acceptors. The inputs are DNA sequence elements each of which has a four-valued nominal attribute encoded to binary, using two binary inputs. This dataset was created based on the splice junction problem dataset from the UCI repository of machine learning.

2. **Thyroid:** This dataset consists of 7,200 examples each consisting of 21 inputs and 3 outputs. The three outputs represent whether or not a patient's thyroid has over function, normal function, or under function. The inputs represent information gathered during patient query and examination. This dataset was created based on the Artificial Neural Network (ANN) version of the thyroid disease problem dataset from the UCI repository of machine learning databases.
3. **Building:** This is an approximation problem. The dataset consists of 3,156 examples each consisting of 14 inputs and 3 outputs. The three outputs represent the usage of electrical energy, hot water, and cold water, based on the date, time of day, outside temperature, outside humidity, solar radiation, and wind speed. This dataset was created based on problem A from "The Great Energy Predictor Shootout – the first building data analysis and prediction problem" contest organized in 1993 for the ASHRAE meeting in Denver Colorado.
4. **Spam:** This dataset consists of 4,000 training examples, and 599 testing examples, each consisting of 57 inputs and 1 output. It was created in July of 1999 by HP labs and donated to the UCI repository. The output represents whether the e-mail is spam or non-spam. The initial 48 inputs represent the percentage of words in the e-mail that match a given word. The next six inputs represent the percentage of characters in the e-mail that match a given character. The next input represents the average length of uninterrupted

sequences of capital letters. The last two integer inputs represent the longest uninterrupted sequence of capital letters, and the total number of capital letters respectively.

5. **Poker:** This dataset consists of 25,010 training examples and 1,000,000 testing examples, each consisting of 85 inputs and 1 output. The output is an ordinal value (0-9) that represents the poker hand. For example, a 0 represents nothing in the hand, while a 9 represents a royal flush. The inputs represent the five cards in the hand with four inputs devoted to the suit and 13 inputs devoted to the rank for each of the five cards.

5. Data Analysis

The hypothesis was concerned with the ability of the parallel NNSOA to outperform the serial NNSOA in a given amount of time using a variety of real world data sets. Prechelt found (1995, 1996) that most theoretical NN articles were based on comparisons using computer generated or synthetic data, which does not adequately test the algorithms performance. Prechelt addressed this problem by collecting real-world data sets formatted in a standard way and suggested a standardized methodology for using them in learning algorithm evaluations (Prechelt, 1994). This research used three problems from his original research with the addition of two current problems from the UCI repository for machine learning. The additional problems used Prechelt's suggestions for structuring the comparison for benchmarking purposes. The inclusion of these real world data sets added rigor, while at the same time giving more reliable comparisons to previous studies based on these same data sets (Sexton et al, 2004, Prechelt, 1994).

The problems selected for analysis of the hypothesis were ones that had more inputs and/or observations. The following tables compare the classification error percentages for each of the classification problems.

6. Results

Gene Problem

Classification Error %		Hidden Nodes	Relevant Weights		Relevant Inputs	
Serial	Parallel		Serial	Parallel	Serial	Parallel
20.91%	13.48%	10	155	88	78	55
12.59%	12.34%	7	52	46	37	34
15.87%	12.85%	5	44	48	32	29

Thyroid Problem

Classification Error %		Hidden Nodes	Relevant Weights		Relevant Inputs	
Serial	Parallel		Serial	Parallel	Serial	Parallel
4.94%	3.33%	2	8	10	7	7
5.16%	2.67%	3	10	10	9	6
5.44%	4.11%	2	11	10	9	6

Building Problem

Classification Error %		Hidden Nodes	Relevant Weights		Relevant Inputs	
Serial	Parallel		Serial	Parallel	Serial	Parallel
6.8E-02	6.8E-02	50	66	67	14	14
5.2E-02	5.0E-02	50	64	70	14	14
5.0E-02	4.9E-02	50	69	74	14	14

Spam Problem

Classification Error %		Hidden Nodes	Relevant Weights		Relevant Inputs	
Serial	Parallel		Serial	Parallel	Serial	Parallel
12.00%	9.50%	3	53	41	35	29
5.17%	4.67%	3	32	28	30	26
10.33%	7.50%	3	29	25	34	31

Poker Problem

Classification Error %		Hidden Nodes	Relevant Weights		Relevant Inputs	
Serial	Parallel		Serial	Parallel	Serial	Parallel
11.38%	3.97%	150	3980	2986	85	85
11.28%	3.96%	150	3980	2886	85	85
11.49%	4.02%	150	3980	2886	85	85

7. Summary of Findings

A side-by-side comparison of the serial NNSOA and the parallel NNSOA makes it evident that the parallel NNSOA produces networks that possess a more efficient structure and produce better results. Both algorithms were allowed to run an equal number of generations during the hidden node search to allow both networks equal opportunity to find a global solution for the problem. As the following table shows, this resulted in finding the same number of hidden nodes. However, the parallel NNSOA has a better (lower) classification error percentage for all classification problems. This makes intuitive sense, because the parallel algorithm's was able to better search the weight space and find solutions that were more parsimonious in structure. This allowed the networks to generalize better by only including those weights and inputs that were relevant for prediction.

8. Conclusion

This research has shown that in a given amount of time the parallel NNSOA will obtain better results than the serial NNSOA on a variety of real-world problems. While it makes intuitive sense that more computers should yield better results, Seiffert (2004) found that it is not always the case. He found that the training algorithm (back propagation in the paper referred to above) could actually cause performance to decrease if there is a significant amount of data communications overhead (Seiffert, 2004). This research contributes to the body of scientific knowledge in the areas of data mining, and parallel neural networks. It has also resulted in software components that will be used to make further advancements possible. The research was designed to answer the research question:

Future research will explore new ways of parallelizing the modified genetic algorithm used by the NNSOA. Better results may be possible if new, more efficient methods are found to parallelize the algorithm. This research has provided a benchmark for future research to compare against as new approaches are created. The software components created by this research for the presentation and analysis of data can also be used in future research allowing the researchers to spend more time on the optimization of the algorithm and less time analyzing and presenting results.

This research has also made it possible to evaluate networks utilizing a far greater number of hidden nodes. The time required by the serial NNSOA to evaluate complex networks is far too great.

The need to efficiently process ever-growing amounts of data continues to motivate researchers in the areas of machine learning and data mining. Neural network researchers have utilized parallel processing in hopes of finding scalable algorithms that will handle large data sets and complex networks.

Massively scalable neural networks trained and optimized using a genetic algorithm can now be applied to a wide range of problems including prediction, data classification and approximation problems. Further research is needed to explore various ways to parallelize the NNSOA algorithm using the benchmarks provided by this research. As hardware advances continue to be driven by Moore's law, software such as the parallel NNSOA is needed to fully utilize the processing power available.

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A STUDY OF MOMENTUM AND CONTRARIAN STRATEGIES BASED PORTFOLIOS IN US MARKET

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Abstract

Paper studies the mean reversion phenomena and momentum phenomena in the standard and poor 100 stocks index in US markets by forming the portfolio by varying sizes of 10 stocks, 20 stocks and 30 stocks. The resilience parameter of stock in terms of price is used to calculate a ratio. This ratio is undertaken as the identifying the stocks for the portfolio formation. Various portfolios are formed on the basis of number of observation days and holding period. Momentum portfolio provides the negative returns for all the short and long term portfolios. Whereas, the portfolios based on contrarian strategy were providing the significant positive return across all the holding periods. It is also found that the highest returns were generated by portfolios which were formed on the basis of one previous day information for selection of stocks, rather than longer historical information. The presences of abnormal returns reflect the semi strong form of market efficiency. Hence the market investors can build the portfolio on the basis of historical information with mean reversion and momentum characteristics in order to generate abnormal returns.

Keywords: Momentum, Contrarian, Mean reversion, Portfolio performance

Introduction

The objective of the investment is to generate returns at the least risk levels. Momentum and mean reversion are the two major phenomena's that have been researched in the equity markets. Momentum and contrarian strategies (mean reversion) are found to earn abnormal returns at low risk as due to neutral investment characteristic. Most of the studies have found that the presence of momentum in the period of more than 12 months, whereas the mean reversion phenomena presence was realised in portfolios with minimum period of three to three and half years (Ronald Wu Yangru Gilliland Erik Balvers, 2000).

Investment portfolios built based on contrarian strategy is one of interesting areas in the global markets. The source of returns generated from the contrarian strategies have been attributed to either of systematic risk of formed portfolio or because of the over expectation of the investors from the past winners. The

strong form of markets have no place for the over expectation (i.e. as they are corrected immediately). The developed markets are considered to be tending towards the strong form of efficient markets. Financial markets of United States are considered to be part of developed markets. The S&P 100 Index (Standard & Poor's), a sub-set of the S&P 500®, measures the performance of large cap companies in the United States. The Index comprises 100 major, blue chip companies across multiple industry groups. Individual stock options are listed for each index constituent.

Literature Review

Mean reversion a phenomenon is studied in US and other developed markets for the past half century. The contrarian strategy is handled in two ways i.e. restricted and unrestricted contrarian strategy (Ramiah et al., 2011). Majority of the studies have undertaken the analysis on the basis of monthly returns. Stocks are classified as hot stocks and cold stocks on the basis of daily returns of individual stocks. The gainers are classified as hot stocks and losers as cold stocks (Ramiah et al., 2011). The contrarian strategy based portfolios are built in order to capture the mean reversion phenomena. Contrarian strategy is to have short position with recent winners and long position on the recent losers. Stocks are ranked on the basis of the previous returns and are classified as winners (stocks with positive returns) and losers (stocks with negative returns) (Narasimhan Jegadeesh and Sheridan Titman, 1993). Once the winners and losers are classified then the portfolio is built with equal weights for winners and losers.

Mean reversion phenomenon is studied at national/international markets and developed/developing financial markets. The few significant studies in the developed economies are: De Bondt and Thaler (1985) worked with the CRSP monthly return data between 1933 and 1979. Campbell & Limmack (1997) studied UK companies (1979-1990) classified as winners and losers. Ramiah et al. (2011) studied Australian markets from the contrarian and momentum perspective. Kudryavtsev (2013) worked on data of Dow Jones Industrial Index stocks for the period January 2002-September 2011. Studies were done on the developing markets by various researchers. Liu et al. (2008) studied both the momentum and mean reversion phenomena in Asian markets; Asian markets were further categorised into developing and developed markets. Liu et al. (2011) analysed the 20 major stock markets with data from 1975 to 2006. Richards (1997) studied the data of 16 countries national stock returns, data of 1970 to 1995 were undertaken for the study. Balvers et al. (2000) worked on data of national equity prices of 18 nations in the period of 1969 to 1999. Balvers & Wu (2006) studied the momentum and mean reversion phenomena in 18 country indexes of Morgan Stanley Capital International; the time period studied was from 1969 to 1999. Sevim and Akarim (2013) analysed data of 18 country indexes in the period of 1995-2010.

De Bondt and Thaler (1985) studied the portfolio returns generated because of longterm reversals. Jegadeesh and Titman (1993) ranked the stocks into deciles based on returns generated in the medium term. It is found the top decile portfolio (winners) consistently outperforms the bottom decile portfolio (losers) in medium term. Najand and Alsubaie (2009) studied stock returns in the Saudi stock market: found the presence of price reversals phenomena in short term rather than price rise after the stock reaches the 52-week high. Mun (1999) studied the performance of portfolio on the basis of contrarian

strategy: found that the abnormal returns were present in both Germany and France markets. Balvers et al. (2000) utilized panel for testing mean reversion. Balvers et al. (2000) utilized parametric contrarian strategy in making of portfolio, and generate returns of the same. George and J.Hwang (2004) used the ratio calculated as current price as the numerator and 52-week high as the denominator. According to this ratio, portfolio is formed by taking a long position on top 30 percentile (winners) and short position on the bottom 30 percentile (losers) stocks. This particular portfolio positions are held for a term of 6 to 12 months.

Lakonishok et al. (1993) found abnormal earnings from portfolio based on contrarian strategy. The study categorizes stocks as value stocks and glamour stocks. The portfolio is formed with long position on value stocks and shorting the glamour stocks. Campbell & Limmack (1997) finds that small firms with negative returns have reversed in positive returns in the next 2 to 5 years, whereas small firms with the positive returns in the first year continued to generate positive returns in the long term. The results of the study contradict the US studies with contrarian strategies. Richards (1997) noted that large reversals are found in small markets as compared to large markets. They noted that the reversal phenomenon was strongest in minimum portfolio duration of 3 years and has generated six percent (approx) per annum since 1970. Campbell & Limmack (1997) found that the size of firms has also role in the return reversion phenomena. Many studies found that the abnormal returns could be availed due to the irrationality of investors. This continued short term returns could be explained with the help of the macro economic variables identified by the authors. Researchers have noted that the lagged economic variables forecasted values could actually remove the short term returns of the stocks (Chordia and Shivakumar, 2002). It is found that there is no significant difference between the loser countries portfolio and winner countries portfolio in terms of risk, standard deviations, covariance (Richards, 1997).

De Bondt and Thaler (1985) found that people overreact to unexpected and dramatic news: they found that portfolio of losers stocks generate 25 percent more returns than the portfolio of winner stocks. However, this phenomenon has occurred in the duration of more than 5 years after portfolio formation. Parametric contrarian strategy resulted in generating the higher returns in comparison to buy and hold strategies and contrarian strategy of De Bondt and Thaler (Balvers et al. 2000). Researchers have studied the momentum and mean reversion phenomena from behavioural aspects as well. The contrarian portfolios have been found to generate returns in intermediate and short term periods (Mun, 1999). Badrinath and Kini (2001) concluded that the systematic risk was not contributing towards the abnormal earnings earned by the contrarian strategy and hence the expectation theory as the sole reason for the abnormal earnings. George and J. Hwang (2004) analysed the momentum and mean reversion phenomena from behavioural dimension and narrowed down to anchor and adjust bias. Investors are reluctant to move the price higher than the reference points (like 52 week high) on receiving the good news; however on passage of time the investors do overcome the initial bias and rectify the price. Their paper found that nearer the 52 week high, better is the predictive power for the future returns. However, the nearness to 52 week high strategy could not explain the long term reversal. The abnormal earnings earned in contrarian strategies can be attributed to either irrational pricing or risk of the stocks (Xu, 2001).

Liu et al. (2008) found the cause of abnormal returns in contrarian strategy to be the overreaction of investors. Lakonishok et al. (1993) found that investors overestimate growth rates of the value stocks and also conclude that the risk is not a reason for higher returns from value stocks. Balvers et al. (2000) established presence of mean reversion phenomena in stock indexes. Their study found that it takes around three to three-and-half years for the mean reversion to take place. With help of panel approach and Monte-Carlo simulation it was found that mean reversion strategy based portfolio can generate about 18 to 20 percent per year. Liu et al. (2011) found that the 52 week high price is better predictor for the forecasting the future prices. Kudryavtsev (2013) analysed the daily data and found that higher stock returns are attained in the case of large difference in high to close price, whereas lower stock returns are attained in the following days with large price differences for low to close price. Mun (1999) concludes that the source of the abnormal returns is overreaction hypothesis and these returns were not related to the risk coefficients. Similarly, Du (2008) also confirms that the investors do overreact while correcting the initial bias. They further concluded that investors not only underreact to information but are equivalently 'overreactive' to new news. The literature provides the systematic risk of portfolio, expectation of investors, irrational pricing, risk of stocks, and overreaction of the investors as the major reasons for mean reversion phenomena.

Liu et al. (2008) found empirical results supporting the abnormal returns generated with help of contrarian strategies in the developing markets of Asia for both short and long duration. Ramiah et al. (2011) found that both restricted and unrestricted contrarian strategies do generate abnormal profits. Paper finds that the volumes have significant impact upon the returns generated by contrarian strategy. Mean reversion phenomena was found reflected in the portfolio duration of 30 to 38 months (Sevim and Akarim, 2013). They have found that the mean reversion phenomena exists, reflecting the presence of inefficiencies in the weak form of the developing economies.

Focussing on the developed markets of Asia, Liu et al. (2008) concludes that the momentum strategies provides abnormal returns in the long term, while contrarian strategies provides abnormal returns in the short term. Balvers & Wu (2006) finds that there is significant presence of both momentum and mean reversion phenomena: they found negative correlation between momentum and mean reversion phenomena ($r = -0.35$). Balvers & Wu (2006) formed the indicator on the basis of momentum and mean reversion phenomena. Portfolio formed by taking a long position on highest indicator national market and short position on the lowest indicator national market has a potential of annual excess return of 19.4% over the 20 years sample period 1980-1999. Balvers & Wu (2006) concluded that abnormal returns generated by joint momentum – mean reversion model is greater than the excess return generated by either momentum or mean reversion models. Du (2008) empirically found that both short-run momentum and long-run reversals phenomena occur simultaneously in international stock indices after risk adjustment. These results are applicable for both the strategies based on past returns and nearness to 52 week high. Sevim and Akarim (2013) found that the Contrarian strategy had the highest return portfolio, whereas momentum portfolio provided the second highest returns. The Max3-Min3 portfolio was the best performer in the contrarian strategy and Max1-Min1 portfolio was found to be the worst portfolio.

Campbell & Limmack (1997) found that winner companies that provided abnormal positive returns and loser portfolio generated negative returns. George and J. Hwang (2004) also found that the 52-week high strategy returns in long term are explained majorly by momentum returns and not because of return reversals. Liu et al. (2011) studied momentum in international markets and empirically confirmed the presence of momentum phenomena. However, profits were not significant once the transaction costs were incorporated.

While various studies do confirm the existence of mean reversion and momentum phenomena in developed markets, there is dearth of studies with help of ‘daily returns’. The present study undertakes the analysis of the mean reversion and momentum phenomena of stocks listed on the Standard & Poor (S&P) with help of daily returns of the stocks. The form of the markets is also studied with help of the stock data of S&P. The momentum strategy considered in the present study is to take long position on the stocks with higher CLHL ratio (past winners) (Jegadeesh et al., 1993, Ramiah et al., 2011); the contrarian strategy considered is to take long position on the stocks with least CLHL ratio (past losers) and to take short position on the stocks with highest CLHL ratio (past winners) in order to capture the mean reversion phenomena (Badrinath and Kini, 2001, Mun, 1999). On the basis of literature review and research objective, following are the two hypotheses to be studied:

Null hypothesis 1: There is no significant positive earnings of the portfolio formed on the basis of momentum strategy

Null hypothesis 2: There is no significant positive earnings of the portfolio formed on the basis of contrarian strategy

Data and Methodology

Daily data of 100 stocks from 1st January 2000 to June 2013 belonging to Standard & Poor (S&P) Index are considered for the analysis. The daily values of closing, High, Low price are considered of 3395 data points for each stock of S&P. detect

The CLHL ratio of difference of closing price and low price to the difference of high price to low price is calculated. This ratio reflects that the part of return attained to maximum return could have attained.

$$\text{CLHL Ratio} = \frac{2 * (\text{Closing price} - \text{low price})}{(\text{High price} - \text{Low price})} - 1 \quad (1)$$

CLHL ratio attained as per the formula 1, explains the nearness of stock price to the low (high) price, ranges in between ‘-1’ and ‘1’. CLHL ratio with value ‘1’ reflects that the stock price has the same value as High price, and ‘-1’ value states that the stock price is same as low price. Hence, the lower the CLHL ratio, more is the possibility of mean reversion phenomena i.e. as it is presently near to low price, the stock price would tend to move towards high price. The CLHL ratio measures the resilience of the stock in term of market price.

Once the ratio for the daily returns for 100 stocks are calculated. Portfolio is formed by taking a long

position on stocks with lower CLHL ratio and short position on stocks CLHL ratio greater than zero. The transaction costs were assumed to be zero for this particular study. The portfolio return is calculated on the basis of logarithmic returns of individual stocks in the portfolio.

Three different portfolios are built for study of mean reversion and momentum strategy. The number of day's information considered for attaining the values of closing price, opening price, high price and low price in order to calculate CLHL ratio defines the type of portfolio. Portfolio type 1 considers the past 1 day data for attaining the closing price, opening price, high price and low price of the stock. In portfolio type 2, data of past 3 days is considered and in portfolio type 3 the data of past 5 days are considered. Once the information is retrieved, then CLHL ratio is calculated for the each of these stocks on the basis of retrieved information. In each phase both the momentum and mean reversion portfolios were built. In the momentum portfolios, long position of stocks with highest CLHL ratios is undertaken. Whereas in the contrarian portfolios there is a long position of stocks with lowest CLHL ratios and short position on the stocks with highest CLHL ratios.

Three portfolios were built under the momentum strategy: portfolio with long position on the 10 stocks with highest CLHL ratio, portfolio with long position on the 20 stocks with highest CLHL ratio and portfolio with long position on the 30 stocks with highest CLHL ratio. Similarly, three portfolios were built under contrarian strategy: portfolio with long position on the 10 stocks with the least CLHL ratio and short position on the 10 stocks with the highest CLHL ratio, portfolio with long position on the 20 stocks with the least CLHL ratio and short position on the 20 stocks with the highest CLHL ratio and portfolio with long position on the 30 stocks with the least CLHL ratio and short position on the 30 stocks with the highest CLHL ratio. Portfolios are formed every day and dissolved by the other day; this process is repeated for the various tenures of 1, 2, 3, 4, 5 and 10 years.

In building a Momentum portfolio A, the CLHL ratio (depending on the portfolio type, the number of previous days is considered for the attaining values of High price, Low price and Closing price) is calculated for all the 100 stocks of S&P as part of first step. In second step, top 10 stocks (on the basis of CLHL ratio) are selected to form the portfolio and long position is taken on these stocks. Day return of the portfolio is calculated on the weighted sum of all the 10 stock day returns. Finally, the position is squared off in the evening. The whole process is repeated on the next day.

Similarly portfolio B, the number of the stocks considered are 20 and portfolio C, the number of stocks considered are 30.

In building a contrarian portfolio CA, the CLHL ratio (depending on the portfolio type, the number of previous days is considered for the attaining values of High price, Low price and Closing price) is calculated for all the 100 stocks of S&P as part of first step. In second step, short position is taken on top 10 stocks (on the basis of CLHL ratio) and long position is taken on the bottom 10 stocks (on the basis of CLHL ratio). Day return of the portfolio is calculated on the weighted sum of all the daily return of 10 stocks of long position and it is deducted by the weighted sum of daily returns of 10 stocks of short

position. Finally, the positions are squared off in the evening. The whole process is repeated on the next day.

Similarly portfolio CB, the number of the stocks considered are 20 for short position and 20 stocks for long position and portfolio CC, the number of stocks considered are 30 for short position and 30 stocks for long position.

One sample t test is conducted on the returns generated by portfolios for various tenure periods of 1, 2, 3, 5, 10 and 13 years in order to test the hypothesis.

One-sample t-test

In testing the null hypothesis that the population mean is equal to zero, the statistic equation used as per the formula 2.

$$t = \frac{\bar{x} - \mu}{s/\sqrt{n}} \quad (2)$$

Where \bar{x} the sample mean, S is calculated by the standard deviation of the sample with n as the sample size. The degrees of freedom used in this test are n – 1. The distribution of the population of sample means, \bar{x} , is assumed to be normal.

Empirical Results

Portfolios built on the basis of momentum strategy and contrarian strategies are found to generate positive returns. Table 1 and table 3 provide the average daily returns and Cumulative returns of the portfolios formed on the basis of momentum strategy. Similarly, Table 2 and table 4 provide the average daily returns and Cumulative returns of the portfolios formed on the basis of contrarian strategy

Momentum results

Momentum of the portfolio is calculated on the basis of taking the long position of the stocks having the Higher CLHL ratio. Momentum based portfolios have generated the negative returns across varying holding periods. However, the results were significant (at 99 percent confidence level) for all tenure periods. The average day returns ranged from -0.44% to -0.06% for the different portfolios.

Portfolio type 1 (where opening price, close price, high price are attained from one prior day information) had an average day returns in between -0.44% to -0.08%. Portfolio A1 with 10 stocks in the momentum strategy had significant negative average day returns of -0.16% for the holding period 10 years and above, and cumulative return of -432.79% return for same 10 year holding period. Portfolio B1 with 20 stocks had the significant average day returns lower than C1 portfolio. Similarly, for the portfolio C1 with 30 stocks had the significant average day returns of -0.1% returns for the holding period of 10

years and above. The cumulative return attained was -49.86% for one year to -262.69% for ten years.

Portfolio type 2 (where opening price, close price, high price are attained from past three days information) had an average day returns in between -0.34% to -0.06%. Portfolio A3 with 10 stocks in the momentum strategy had significant negative average day returns of -0.15% for the holding period 10 years, and cumulative return of -365.47% return for same 10 year holding period. Portfolio B3 with 20 stocks had the significant average day returns of -0.1% for the holding period of 10 years and above. The cumulative return attained was -257.12% returns for ten years. Similarly, for the portfolio C3 with 30 stocks had the significant average day returns of -0.09% returns for the holding period of 10 years and above. The cumulative return attained was -214.78% for ten years.

Portfolio type 3 (where opening price, close price, high price are attained from past five days information) had an average day returns in between -0.32% to -0.06%. Portfolio A5 with 10 stocks in the momentum strategy had significant negative average day returns of -0.13% for the holding period 10 years, and cumulative return of -318.83% return for same 10 year holding period. Portfolio B3 with 20 stocks had the significant average day returns of -0.1% for the holding period of 10 years and above. The cumulative return attained was -240.52% returns for ten years. Similarly, for the portfolio C3 with 30 stocks had the significant average day returns of -0.08% returns for the holding period of 10 years. The cumulative return attained was -198.38% for ten years.

All the portfolios in the momentum have negative returns across the period. The momentum phenomena have significant results for all the tenure periods of 1, 2,3,4,5 and 10 years. The losses in the portfolios have decrease on the increment in the number of stocks in the portfolio. Loss is also decreased once the CLHL ratio is calculated on the basis of previous 5 days rather than on the basis of previous day or previous three days information.

Contrarian results

Portfolios formed on the basis of contrarian strategy have also yielded the positive returns across the varying holding periods. Returns generated in all the varying holding period were significant at 95% confidence level. The average daily returns were in the range of 0.11% to 0.65% and the cumulative returns in 85.78% for a year to the 672.83% for a ten year period.

In the portfolio type 1, portfolio CA1 with long position on the 10 stocks with the least CLHL ratio and short position on the 10 stocks with the highest CLHL ratio. The returns obtained were in the range of 0.65% average day return for 1 year holding period and 0.26% for a 10 holding period. Whereas the cumulative returns were 162.02% for the 1 year holding and 672.83% for the 10 year holding period. Returns generated by the portfolios CB1 with long on 20 stocks and short on 20 stocks was having lower returns in than CA1. Similarly, portfolio CC1 with long on 30 stocks and short on 30 stocks was having lower returns than CA1 and CB1.

In the portfolio type 2, portfolio CA3 with long position on the 10 stocks with the least CLHL ratio

and short position on the 10 stocks with the highest CLHL ratio. The returns obtained were in the range of 0.61% average day return for 1 year holding period and 0.23% for a 10 year holding period. Whereas the cumulative returns were 150.76% for the 1 year holding and 579.92% for the 10 year holding period. Returns generated by the portfolios CB3 with long on 20 stocks and short on 20 stocks was having lower returns in than CA3. Similarly, portfolio CC3 with long on 30 stocks and short on 30 stocks was having lower returns than CA3 and CB3.

In the portfolio type 3, portfolio CA5 with long position on the 10 stocks with the least CLHL ratio and short position on the 10 stocks with the highest CLHL ratio. The returns obtained were in the range of 0.50% average day return for 1 year holding period and 0.22% for a 10 holding period. Whereas the cumulative returns were 122.31% for the 1 year holding and 540.03% for the 10 year holding period. Returns generated by the portfolios CB5 with long on 20 stocks and short on 20 stocks was having lower returns in than CA5. Similarly, portfolio CC5 with long on 30 stocks and short on 30 stocks was having lower returns than CA5 and CB5.

It has been found that the average day return falls as the holding period increases. It is also found that the average day returns falls from the portfolio type 1 through portfolio type 3. This reflects that the increment in the number of past day information would result in lower returns. Finally, portfolio with long position on 10 stocks (lower CLHL ratio) and short on 10 stocks (higher CLHL position) is having higher returns as compared to rest of the portfolio returns. That is the increment in number of stocks in the portfolio is leading to averaging out and hence decrement in the overall portfolio. Secondly, the contrarian strategy portfolio had generated returns and was significant for various tenures as in 1,2,3,5 and 10 years. Thirdly, the aggregate returns are decreased with incorporation of older data or have higher return generation capability with help of the recent information. This reflects the efficiency of the S&P markets i.e. semi strong and better form of the market efficiency.

Conclusion

The study finds that the presence of mean reversion phenomena in the S&P markets in the past 13 years. The study also finds that the strategy applied can generate abnormal returns in the long term. This also reflects that the presence of ineffectiveness even in the developed market. Study also finds the presence of the momentum phenomena in the S&P markets across all the tenures of portfolios formed.

Momentum portfolios formed on the basis of the information of the CLHL ratio calculated on the previous 5 days were having significant and higher returns compared to rest of the portfolios. It is also found that the momentum portfolios with 10 stocks, 20 stocks or 30 stocks were having the significant negative returns, however the portfolio with 30 stocks was having the least losses as due to more number of stocks.

Portfolios formed on the basis of contrarian strategy in S&P markets have the significance across all the tenures. Portfolios with shorting of 10 stocks and longing of 10 stocks have the highest returns as

compared to the rest of the portfolios. Even in the contrarian strategy portfolios it is found that the portfolios formed with the CLHL ratio calculated on the basis previous day information.

In contrarian strategy, the results reflect that portfolios based with one day old information have better performance than the rest of the portfolios. So, investors have the opportunity to attain returns only with the latest information rather than old information. This also reflects the semi strong and better form of the market efficiency.

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Table 1: Average daily returns of the momentum portfolio. Portfolio type 1 is consisting of stocks selected on the basis of CLHL ratio calculated with previous day data (Closing price, High price, Low price) of the stocks. Portfolio type 2 has CLHL ratio calculated on the basis of data of previous 3 days and portfolio type 3 has CLHL ratio calculated on the basis of data of previous 5 days. Long position is taken in sequence A having 10 stocks, sequence B having 20 stocks and sequence C having 30 stocks for building the portfolios. The tenure mentions the number of years the process of the selection of stocks and formation of portfolio is undertaken.

Tenure	Portfolio type 1			Portfolio type 2			Portfolio type 3		
	A1	B1	C1	A3	B3	C3	A5	B5	C5
1	-0.44%***	-0.29%***	-0.20%**	-0.34%***	-0.23%***	-0.20%**	-0.32%***	-0.22%***	-0.23%***
2	-0.33%***	-0.23%***	-0.19%***	-0.31%***	-0.23%***	-0.19%***	-0.29%***	-0.22%***	-0.20%***
3	-0.29%***	-0.23%***	-0.19%***	-0.28%***	-0.22%***	-0.19%***	-0.27%***	-0.21%***	-0.18%***
4	-0.22%***	-0.18%***	-0.14%***	-0.21%***	-0.16%***	-0.13%***	-0.21%***	-0.15%***	-0.13%***
5	-0.18%***	-0.14%***	-0.11%***	-0.16%***	-0.12%***	-0.10%***	-0.16%***	-0.12%***	-0.10%***
10	-0.16%***	-0.12%***	-0.10%***	-0.15%***	-0.10%***	-0.09%***	-0.13%***	-0.10%***	-0.08%***
13	-0.13%***	-0.10%***	-0.08%***	-0.13%***	-0.08%***	-0.06%***	-0.11%***	-0.07%***	-0.06%***

Table 2: Average daily returns of the momentum portfolio. Portfolio type 1 is consisting of stocks selected on the basis of CLHL ratio calculated with previous day data (Closing price, High price, Low price) of the stocks. Portfolio type 2 has CLHL ratio calculated on the basis of data of previous 3 days and portfolio type 3 has CLHL ratio calculated on the basis of data of previous 5 days. In sequence A, Long position is taken 10 stocks with lowest CLHL ratio and short position is taken on 10 stocks with highest CLHL ratio, sequence B has 20 stocks in short position and 20 stocks in long position and sequence C has 30 stocks in the short position and 30 stocks in long position. The tenure mentions the number of years the process of the selection of stocks and formation of portfolio is undertaken.

Tenure	Portfolio type 1			Portfolio type 2			Portfolio type 3		
	CA1	CB1	CC1	CA3	CB3	CC3	CA5	CB5	CC5
1	0.65%***	0.47%***	0.32%***	0.61%***	0.45%***	0.36%***	0.5%***	0.4%***	0.35%***
2	0.44%***	0.33%***	0.26%***	0.43%***	0.34%***	0.28%***	0.4%***	0.32%***	0.27%***
3	0.38%***	0.32%***	0.27%***	0.38%***	0.3%***	0.25%***	0.38%***	0.29%***	0.23%***
4	0.32%***	0.29%***	0.24%***	0.3%***	0.24%***	0.2%***	0.31%***	0.24%***	0.19%***
5	0.26%***	0.23%***	0.2%***	0.24%***	0.19%***	0.17%***	0.26%***	0.2%***	0.16%***
10	0.26%***	0.22%***	0.19%***	0.23%***	0.18%***	0.15%***	0.22%***	0.17%***	0.14%***
13	0.22%***	0.19%***	0.16%***	0.2%***	0.15%***	0.13%***	0.19%***	0.14%***	0.11%***

*** P < .01, ** P < .05

Table 3: Cumulative returns of the momentum portfolio. Portfolio type 1 is consisting of stocks selected on the basis of CLHL ratio calculated with previous day data (Closing price, High price, Low price) of the stocks. Portfolio type 2 has CLHL ratio calculated on the basis of data of previous 3 days and portfolio type 3 has CLHL ratio calculated on the basis of data of previous 5 days. Long position is taken in sequence A having 10 stocks, sequence B having 20 stocks and sequence C having 30 stocks for building

the portfolios. The tenure mentions the number of years the process of the selection of stocks and formation of portfolio is undertaken.

Tenure	Portfolio type 1			Portfolio type 2			Portfolio type 3		
	A1	B1	C1	A3	B3	C3	A5	B5	C5
1	-109.17%***	-71.82%***	-49.86%**	-84.29%***	-56.44%***	-49.45%**	-78.39%***	-55.37%***	-57.52%***
2	-164.74%***	-116.66%***	-93.41%***	-155.36%***	-116.23%***	-94.36%***	-141.55%***	-107.29%***	-98.29%***
3	-223.17%***	-174.88%***	-145.56%***	-211.14%***	-166.53%***	-139.91%***	-205.65%***	-156.14%***	-137.55%***
4	-225.25%***	-175.37%***	-143.72%***	-207.93%***	-157.49%***	-130.61%***	-206.11%***	-153.38%***	-126.17%***
5	-228.06%***	-172.32%***	-144.06%***	-204.94%***	-156.52%***	-129.13%***	-203.72%***	-147.74%***	-120.88%***
10	-399.94%***	-313.75%***	-262.69%***	-365.47%***	-257.12%***	-214.78%***	-318.83%***	-240.52%***	-198.38%***
13	-432.79%***	-342.76%***	-280.93%***	-431.99%***	-281.95%***	-219.59%***	-415.61%***	-319.78%***	-255.63%***

*** P < .01, ** P < .05

Table 4: Cumulative returns of the Contrarian portfolio. Portfolio type 1 is consisting of stocks selected on the basis of CLHL ratio calculated with previous day data (Closing price, High price, Low price) of the stocks. Portfolio type 2 has CLHL ratio calculated on the basis of data of previous 3 days and portfolio type 3 has CLHL ratio calculated on the basis of data of previous 5 days. In sequence A, Long position is taken 10 stocks with lowest CLHL ratio and short position is taken on 10 stocks with highest CLHL ratio, sequence B has 20 stocks in short position and 20 stocks in long position and sequence C has 30 stocks in the short position and 30 stocks in long position. The tenure mentions the number of years the process of the selection of stocks and formation of portfolio is undertaken.

Tenure	Portfolio type 1			Portfolio type 2			Portfolio type 3		
	CA1	CB1	CC1	CA3	CB3	CC3	CA5	CB5	CC5
1	162.02%***	116.72%***	79.73%***	150.76%***	111.98%***	89.97%***	122.31%***	99.92%***	85.78%***
2	215%***	164.79%***	128.69%***	212.41%***	167.94%***	137.01%***	195.92%***	157.13%***	131.46%***
3	291.45%***	241.42%***	199.6%***	281.32%***	225%***	188.76%***	284.25%***	219.65%***	174%***
4	328.24%***	286.39%***	236.98%***	300.99%***	240.17%***	204.36%***	310.1%***	240.65%***	188.78%***
5	330.47%***	289.18%***	248.25%***	300.46%***	240.46%***	211.11%***	320.57%***	250.25%***	198.05%***
10	672.83%***	563.21%***	473.54%***	579.92%***	441.98%***	381.69%***	540.03%***	429.5%***	347.34%***
13	750.99%***	647.34%***	544.55%***	677.34%***	498.75%***	426.8%***	677.05%***	706.14%***	682.8%***

*** P < .01, ** P < .05

BEST MODEL OF CSR: AN ANALYSIS OF THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY FOR IMPROVING THE SOCIAL DEVELOPMENT OF THE STAKEHOLDERS- A STUDY ON FOUR PRIVATE COMMERCIAL BANKS

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Abstract

Corporate social responsibility (CSR) becomes an omnipresent topic in today's business literature, but this has largely neglected the institutional role. The introductory report to the essential matters of socio economic review has examined the potential contributions of **Best model theory to understand CSR** as governance's mode. The options have suggested going beyond grounding CSR in the organization's voluntary behavior. And also it tries to understand the vast number of historical & political determinants of weather & in what types of form the corporations have taken on social responsibility. From the historical time, the prevailing notions of CSR emerged via the defeat of more customary forms of socio solidarity in open market economic activities. Meanwhile, CSR is heavily linked to the formal organizations of the stakeholder participation or CSR might also state the intervention in Other progressive frugalities. The tensions arise among the multiple stakeholders & business driven form of CSR has been extended to the transnational level from where the meaning and also the form of CSR remains very consistent & contested. The practice & research of CSR thus rest on a basis paradox among a contrary implication, social binding responsibilities & also the notions of voluntary engagements. On the other hand, the institutional theory is seemed to be promising avenue in order to discover that the way how the boundaries among the business, human resource & the society have been constructed in various ways & also it develops our understandings of the effective of CSR within the wider institutional area of fiscal monitoring.

Key Terms: *Corporate Social Responsibility, Black Cat, Private Commercial Banks, corporate conscience, corporate citizenship, social performance, or sustainable responsible business; Responsible Business, transnational companies, Stakeholder.*

1.1 Introduction

There is a strong debate surrounding the potentiality of Corporate Social Responsibility to improve the

social development since its beginning. The researchers of Corporate Social Responsibility are divided into optimistic and pessimistic. Optimistic believe that the business organization must have potential to improve the social developments in which they are operating (Visser, 2007). But the pessimist believes that business cannot improve social development because they can't violate their profit maximization rules. Actually the most of the CSR researchers agree that CSR has a direct or indirect impact on the social development of the country (Cheney and Roper, 2007).

As the authors are from third world country and they have experienced hostile and crucial issues of developing countries from their birth. When the authors of the project was in Bangladesh, they saw several issues and attended many workshops on Corporate Social Responsibility not only of Different Companies of Bangladesh but also of some renowned other organizations. Thus, the aim of this project is to find out the impact of Corporate Social

Responsibility (CSR) for improving the Social Development of the stakeholders: A Case Study different banks of Bangladesh.

1.1 The Objectives of the Project:

The objectives of the study are given in the following:

- To search out the **Black Cat** of the CSR initiatives practiced by different Banks of Bangladesh.
- To detect the impacts of Corporate Social Responsibility (CSR) for improving the Social Development of the citizen.
- To **propose a CSR Model** for improving the CSR practice of Private Commercial Banks of Bangladesh.

1.2 Research question

- How are the CSR initiatives practiced by different Companies of Bangladesh?
- What are the impacts of Corporate Social Responsibility (CSR) for improving the Social Development of the citizen?
- What are the recommendations for different Companies of Bangladesh through the critical data analysis results for improving its CSR practices?

1.3 Research Hypothesis

- The CSR initiatives practiced by different companies of Bangladesh are not focused on social development
- CSR approaches are one of the main black cat of social corruption of stakeholders
- Proper CSR initiatives do influence over the goal of the business and the environment around it

2. Literature Review

In the preceding section only strategy of finding information about CSR is stated but no definition of CSR is drawn. According to Bhattacharya and Sen (2007) corporate social responsibility (CSR, also called corporate conscience, corporate citizenship, social performance, or sustainable responsible business; Responsible Business) is a form of corporate self-regulation integrated into a business model. However, Creyer and Ross (1996) argue on this point that CSR policy functions as a built-in, self-regulating mechanism whereby a business monitor and ensures its active compliance with the spirit of the law, ethical standards, and international norms. Klein and Dawar (2004) mention in this topic the CSR is a process with the aim to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere who may also be considered as stakeholders. Thus, it is clear that different organizations have framed different definitions - although there is a considerable common ground between them. Therefore, CSR is about how different Companies of Bangladesh manages the business processes to produce an overall positive impact on society.

2.1 The Rise of Corporate Social Responsibility

Bhattacharya and Sen (2007) on this point said that historically, from the industrial revolution to contemporary globalization, the relationship between business and society has been a recurring point of discussion and concern. But Barnett (2007) argues on this view that the interest in corporations' social responsibilities particularly heightened as a consequence of the process of 'globalization' and the neoliberal policies driving that process: the economic liberalization of goods, services and finance, and the promotion of a minimal state. The experimental data are rather controversial, and there is no general agreement about Market mechanisms which have come to dominate world structures, making transnational companies (TNCs) both economically and politically powerful in the developed and the developing world. Pelozo (2013), however, on this point said that the increased mobility of capital enabled TNCs to exploit regulatory differences between states by (re)locating or threatening to relocate their production facilities in countries with regimes more favorable to the financial bottom line. Since they needed foreign direct investment to boost their own economic development, developing countries came under intense competition to attract the TNCs. So-called global 'value chains', with northern buyers controlling a web of low-cost southern suppliers, and economic processing zones offering tax incentives emerged.

Pelozo' analysis has been criticized by a number of writers. Campbell (2007) for example noted that aided by equally globalizing communication technologies, international awareness of the consequences of global economic liberalization grew in the 1990's. TNCs stood accused of enjoying the benefits of

globalization but letting others pay the bill, most notably the developing countries. Therefore, Klein and Dawar (2004), labor and environmental conditions deteriorated and the number of respondents living in extreme poverty failed to decline whereas inequality increased. However, for example, Creyer and Ross (1996) point out that companies such as Shell, Nike, Gap and Levi Strauss were challenged to justify their actions and Wall Street demonstrated that the increased significance of ‘the brand’ and ‘corporate reputation’ made leading companies vulnerable to the effect bad publicity has on profit.

Actually Pelozo (2013) failed to note out that changes in development thinking further increased CSR’s momentum. Development strategies focusing on economic growth moved to incorporate the social dimensions of development, exemplified by the global adoption of the UN Millennium Development Goals (MDGs) and the focus on poverty eradication. But Wood(1991) argues on this point that liberalization, deregulation and a reduced state role meant that key developmental functions traditionally associated with the state, such as the provision of basic infrastructure, health and education and access to water and electricity had been taken over by a range of civil society and market actors (Godfrey et al., 2011).

Thus, it is clear that The Different Companies of Bangladesh only concerned with the short-term financial bottom line might not make the long-term investments necessary to promote human development, socially responsible business, however, was expected to ensure a wider spread of benefits and so demonstrating that there are sound business reasons (‘a business case’) for companies to take CSR seriously has become important to maintaining the momentum. In the next section the dimension of Corporate Social Responsibility has been discussed.

2.2 Corporate Social Development and Social Development

The debate surrounding the potential of CSR to contribute positively to development has been raging since the inception of the term. Commentators on the issue are distinctly divided into the optimists and the pessimists. According to Schuler et al., (2006) the optimists believe that business does indeed have great potential to contribute positively to the social and economic development of the regions they operate in. On the other hand Golob and Jancic (2011) pointed out that the pessimists doubt this belief and assert that businesses cannot contribute to social development because they neither have the requisite authority – which lies with the state – nor the correct incentives.

Schuler et al., (2006) also said that the optimists believe that as businesses are so deeply embedded within the communities they operate, they have great potential to address the social and environmental problems of these communities. However, Trudel et al., (2013) said on this point that by launching innovative initiatives, such as setting up schools and vocational training centres in underdeveloped areas, firms can contribute significantly to improving the lives of respondents living in these areas. They can also improve

living conditions by curtailing certain practices which may harm the environment or the respondents directly. Through such actions, optimists believe CSR has great potential to bring about substantial social improvements (Auger, 2003).

On the other hand, Golob and Jancic (2011) pointed out that pessimists believe that CSR does not have the potential to solve social problems. This is mainly due to two reasons. Firstly, they believe that firms cannot escape their primary goal of making profits. CSR activities will only be followed until they can provide tangible gains to the firm. Although the social environment may improve in the process, the improvement is likely to be short lived. Secondly, they believe that social provision should be solely the job of the state. Godfrey (2011), however, for example mentioned that the state is the elected representative of the respondents entrusted with the task of improving social conditions. It has the required expertise and resources to be able to understand and address the needs of the respondents. Campbell et al., (2007) said that firms lack this expertise and knowledge and should therefore not aim to fulfil the state's obligations. In fact, such an act can actually result in further worsening the condition of respondents. Holbrook (2006), for example, by prohibiting child labour in developing countries, firms can actually undermine the welfare of these children and their families by depriving them of their primary source of income (Frynas, 2005)

Keeping the above issues in mind, Bhattacharya and Sen (2007) suggest that the future critical research agenda on CSR and development should focus on the following four areas: a) the relationship between business and poverty reduction; b) the impact of CSR initiatives; c) governance dimensions of CSR; and d) power and participation in CSR. In the research conducted Bhattacharya and Sen (2007) also emphasizes the importance of understanding the socio-cultural setting in developing countries for CSR activities to make a substantial a positive contribution to development. Finally, Klein and Dawar (2004) highlight the importance of monitoring the state-business relationship in leading the development process.

2.3 Impact of corporate social responsibility (CSR) on The Society

According to Goldstein (2011) corporate social responsibility (CSR) is about how business aligns their values and behavior with the expectations and needs of stakeholders - not just customers and investors, but also employees, suppliers, communities, regulators, special interest groups and society as a whole. Ellen (2000) pointed out on this matter that CSR describes a company's commitment to be accountable to its stakeholders. With businesses focusing on generating profits, sustainability was not a popular concern among companies up until recently. Many analysts now argue that the strategy of CSR has not been successful. Wang (2011) for example, argues that in this era of globalization, multinational corporations (those that conduct business in more than one country) and local businesses are no longer able to conduct destructive and unethical practices, such as polluting the environment, without attracting negative feedback from the general public. With increased media attention, pressure from non-governmental

organizations, and rapid global information sharing, there is a surging demand from civil society, consumers, governments, and others for corporations to conduct sustainable business practices. In addition to this Okad (2005) said that in order to attract and retain employees and customers, companies are beginning to realize the importance of being ethical while running their daily operations. Thus it is clear that the corporate response has often meant an adoption of 'a new consciousness', and this has been known as Corporate Social Responsibility (CSR) since the 1970s.

However, Auger (2011) argues that CSR is not only about fulfilling a duty to society; it should also bring competitive advantage. He also said that many CSR initiatives are executed by corporate in partnership with Non-governmental organizations (NGOs) who are well versed in working with the local communities and are experts in tackling specific social problems.

2.4 How Corporate Social Responsibility makes a Difference in the Development of the Society

A range of scholars, however, question whether CSR can be adapted into meeting the needs of the poor (Luchs et al., 2010). The very idea of business playing a role in development is subject to considerable debate, because it implies the acceptance that the company can meet social and environmental challenges through market-based solutions, and that the privatesector is better at optimizing resources than the public sector (Trudel and Cotte, 2013).

The latter point has been devastatingly critiqued by Schuler and Cording (2006) that criticism is aimed at CSR being 1) misplaced as a concept. Further critique is pointed to 2) competing interests between short-term and long-term horizons; between shareholders and any other stakeholders; between outputs and outcomes when defining CSR's actual impact; and between sharing and withholding social learning. Criticism is also directed at the 3) dominance of northern and TNC perspectives and at 4) not addressing power and participation issues. The 5) inconsistencies in business' behaviour furthermore question whether CSR is able to 'walk the talk'.

First, opponents to CSR Hirschman and Holbrook (1982) argue that there is no place for business to be involved in social development. Neoliberal economists such as Shavit (1990), argue that companies have 'no business' getting involved in the public as they already contribute to society through the creation of jobs, the payment of tax and the delivery of goods and services (Okada, 2013). Other opponents, such as Elkington (1997) argue that CSR is only a public relations tool used to mask the sometimes devastating impact large corporations can have on vulnerable respondents and the environments in which they live, pointing to the continuing negative effects.

Second, the competing logics of development imperatives and business realities are not easily reconciled (Wang et al., 2011)). To accomplish social change takes long-term extensive effort, but most businesses look for short-term maximum returns; company shareholders' interests tend to dominate over the interests of other stakeholders.

Third, the focus on the business case of CSR avoids addressing issues of power and participation that are keys in poverty reduction debates. Because power relations shape the issues that are raised, the alliances that are formed and the successes that are identified (Park, 1986) they tend to reproduce poverty as those who do not normally have a voice in society anyway – such as small-scale farmers, children, workers, and women – are often excluded (Ellen et al., 2000).

Finally, a number of companies that have initiated or are otherwise involved in CSR are the same companies that continue to ignore or fail to address the human rights abuses, poor labor standards, and environmentally harmful activities that occur within their core operations (Goldstein et al., 2011). Codes of conduct are a key CSR tool, but can become a ‘tick-box technique’ relieving corporations from any wider social responsibility (Golob, 2011). For example, even though British Petroleum had complied with the codes of conduct laid down in the Extractive Industries Transparency Initiative, in relation to the construction of the Baku-Tbilisi-Ceyhan pipeline, it did not address the human rights abuses and the destruction of livelihoods of the local communities as a result (Documentary ‘Source’ 2005).

2.5 Drawbacks of CSR

With the urgency of CSR there has been a strong debate surrounding the potentiality of Corporate Social Responsibility to improve the social development. On the other hand in the modern time it has been criticized that due to the CSR the corruption in the organization is increasing. According to Kalerkanta (2015) it has been argued that the fund of CSR is now being used for **Corruption**. The officials in the past did not get enough funds to make to contribution to the society but the modern view it is emphasized to make more and more to spread the humanitarian view of CSR. Thus, the executive officer is getting higher amount of money at hand which they are using as their personal sources. Therefore the corruption is increasing for not being used properly the CSR amount. However Kalerkanta (2015) raised a question what should be the **Key Benchmark for CSR?** In this regard the Standardized CSR concern should be considered. But in the long run it is quite difficult to measure the bench mark for CSR. On the other hand, (Okada, 2013) argued that the company should give a certain percentage of their profit or Budget for CSR activities. But (Wang et al., 2011), for example rejected this idea of (Hirschman and Holbrook, 1982) because if the CSR benchmark is defined by certain percentage the companies will not be will to invest more and more and for CSR. Rather they will keep only the certain profit or budget amount for CSR activities. So, it can be said that there should not be specific benchmark for CSR.

According to Hirschman and Holbrook (1982) CSR is now being used for **funding Political Parties for political alliances**. In 2008, while caretaker governments were in rules, it has been seen that the government creates a fund for their supports and the different industrialist went to this government to gain some supports for their business (Shavit 1990). However, (Okada, 2013.) in contrast with this scenarios, emphasized that CSR activities must be used to the development of the stakeholders e.g. environmental responsibility, social responsibility, human rights responsibility, financial responsibility etc instead of funding Political Parties.

One of the main concerns of any business is to make welfare for the employees. But due to CSR activities, many companies are now decreasing their employees and some decreasing their salaries. According to Kalerkanta (2015) DBBL has introduced an Office ordinance (No, 16 2015) which indicates that the salary for the officer Grad-i has decreased from 64,200 to 34,650; similarly for grad-ii and grad-iii the reduced from 52,200 and 43,800 respectively to 30,200 and 26250 respectively. [See Appendix-.... for details]

Cheney and Roper, (2007) believe that business can CSR violate their **profit maximization rules**. As CSR violates the profit maximization rules, so it should be discouraged. The most important question regarding CSR is that **who should the Ultimate gainer of CSR?** The recent study showed that the CSR activities should be involved to develop the stakeholders of any organizations. Rather the fund of CSR is being used for funding Political Parties for political alliances, the higher authorities is disrupting the fund for their personal gain, the organizational politics is being more severe for CSR.

3. Methodology

3.1 Data Analysis

As both quantitative and qualitative methods have some advantages and disadvantages, thus here it has been chosen the triangulation methods by which it has been overcome the barriers of both methods of data analysis.

3.2 Sampling Technique

In this study the simple random sampling has been used as this research aims to select a certain amount of sample from a wide array of population and thus collect the data from the sample so that the gathered data can be analyzed properly.

3.3 Ethical Issues

There were some ethics which the researcher handled in the right way how we must do it. While filling the questionnaire, respondents must write their name and must put the signature at the last page of questionnaire. According to the ethical consideration the respondents' details must kept confidential and should not use it for any other purpose which create disturbance for them. Also there was an interview with the staffs of Different Companies of Bangladesh, in that interview the information gathered from the staffs about Corporate Social Responsibility also kept as confidential from the management so that it will not make any problem for the staffs working in the same Bank. Apart from that, there are some data which the company will not disclose as it may affect against their business, and which is useful for the research. The authors could have got confidential information from different Companies of Bangladesh but they did not collect it because it is important to consider ethical issues while doing the research.

4. Data Analysis and Presentation

4.1 Quantitative Data Analysis (Survey Questionnaire Analysis)

In this study 50 respondents were interviewed including both male and female of different ages to determine whether the CSR actions taken by the respective bank are quite enough for the society or not. Regarding this enquiry 2 respondents are strongly disagree, 1 is disagree, 12 respondents are neutral, 29 respondents are agree and 6 respondents are strongly agree that CSR activities done by the Private Commercial Banks of Bangladesh is enough. Obviously, 35 respondents from 50 have given positive response on this issue. [This has been shown in the following Table and Graph]

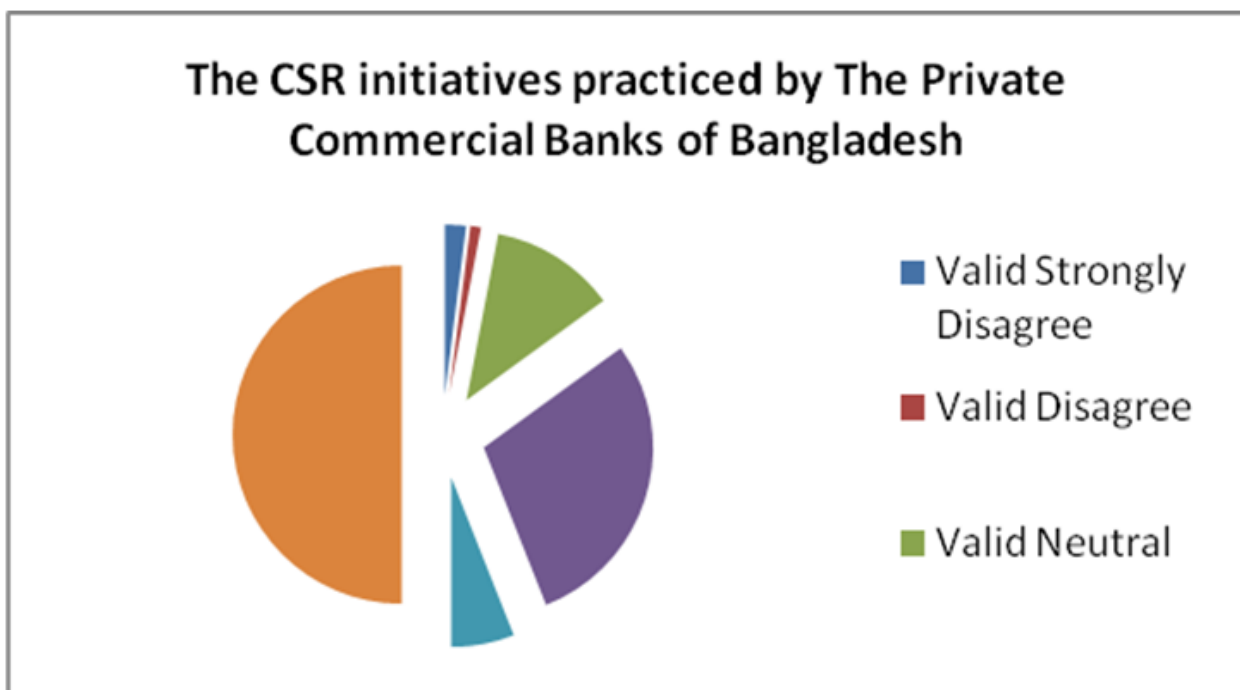


Figure 1: The CSR initiatives practiced by different Banks

Survey Question no-8: CSR has a direct or indirect impact on the social development of the country as well on it.

If any CSR action is done, of course that will have impact on the society either directly or indirectly. The author has collected opinions of 50 selected sample on the issue of direct or indirect impact of CSR actions of different companies of Bangladesh on the society development where 8% respondents are disagree, 10% are neutral, 25% are agree and 11% strongly agree. Here it revealed that CSR actions taken by different companies of Bangladesh has impact on society welfare as 36% respondents become agree on that issue. [This has been shown in the following Table and Graph] **see appendix for table**

Survey Question No-3: CSR has a great potentiality to concentrate on social and environmental

problems of the communities.

In this analysis it is found that among the respondents 25 shows agree while 11 are strongly agree on the issue where great potentiality of CSR of different companies of Bangladesh in social and environmental problems of the communities is asked. After evaluating, it is found that, CSR has great potentiality to solve any social or environmental problems as 36 respondents has given positive response regarding this.

[For graph see appendix]

Research Question-Two: How can different companies of Bangladesh improves the living standard of citizen of Bangladesh by CSR practices?

The impacts of Corporate Social Responsibility (CSR) are great concern now a day for improving the Social Development of the stakeholders. [For table statistics 3 see appendix]

Survey Question No-2: CSR is contributing to the growth of Bangladesh and its citizens

Interview of the study shows the result that 2% become strongly disagree, 8% disagree, 20% is neutral, 50% agree and 22% become strongly agree. Here the percentage of agreed respondents is more which indicates that CSR has great contribution on the growth of organizations. [This has been shown in the following Table and Graph]

See appendix for table

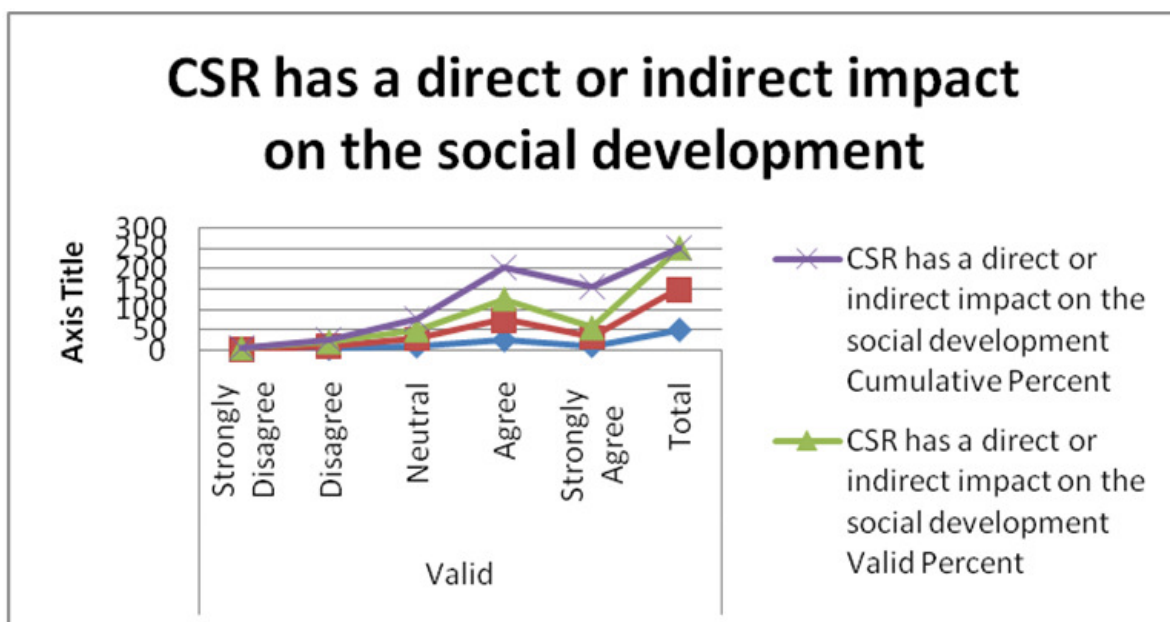


Figure 2 CSR has a direct or indirect impact on the social development

Survey Question No-3: CSR is a rising issue for Social development

Today, corporate social responsibility is an urge for every trade company. Here in this research the author has understood that CSR activities taken by the different companies of Bangladesh have great riding issue for social development. In this enquiry, 25 are agree, 11 are strongly agree, 10 are neutral, 4 are disagree

and 1 is strongly disagree. Among the opinion rate, amount of person being agreed is more. [See appendix for table]

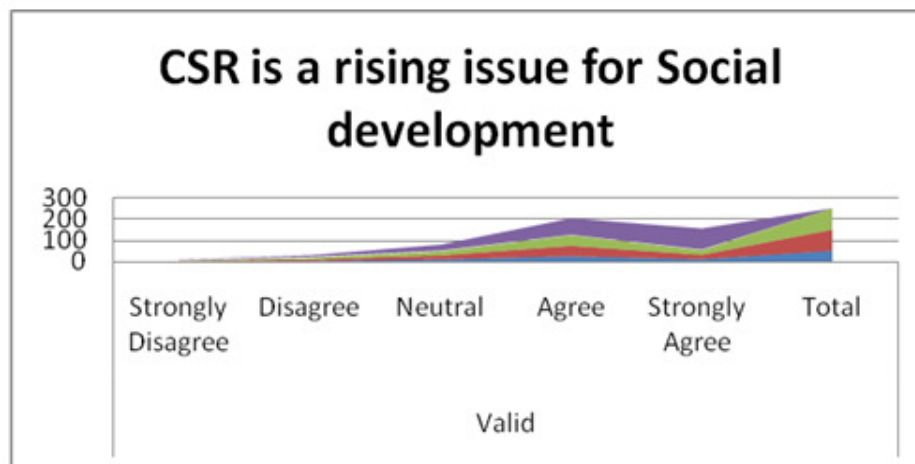


Figure 3 CSR is a rising issue for Social development

Survey Question No-4: CSR of different companies of Bangladesh increases the Living Standard of Citizens of Bangladesh different companies of Bangladesh practices its CSR actions in education, environment, job sector which ultimately raises respondents’ living standard. Regarding this issue, 44% respondents become agree, 22% are strongly agree, 11% are neutral, 5% are disagree and 3% are strongly disagree when the author has taken interviews. Here 66% respondents become agreed that CSR actions of different companies of Bangladesh increases living standard of Bangladeshi respondents. [This has been shown in the following Table and Graph] [See appendix for figure]

Survey Question No-5: CSR is creating the job opportunities for the citizens of Bangladesh More employment gives the opportunity for economy to become more developed. After interviews, the author has found that 33 of 50 respondents have believed that CSR actions of different companies of Bangladesh make more employment arrangement of Bangladeshi citizens. Among them, 20 respondents are agreed and 13 respondents are strongly agreed. Among rest of 50 respondents, 2 are disagreed and 15 are in neutral side. [This has been shown in the following Table and Graph] [See appendix for table]

Survey Question No-6: CSR is improving the environment of Bangladesh At present, many CSR actions are taken for environment welfare like tree plantation, mass awareness program by the Private Commercial Banks of Bangladesh which improves the environmental condition of Bangladesh. In this matter, 32 of sample of 50 respondents have positive response where 18 are agreed and 14 respondents are disagreed. Among other 18 of sample of 50 respondents, 3 are strongly disagreeing, 4 are disagreed and 11 respondents are in neutral position. [This has been shown in the following Table and Graph]

Table 1 CSR is improving the environment of Bangladesh

		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<i>Valid</i>	<i>Strongly Disagree</i>	3	6.0	6.0	6.0
	<i>Disagree</i>	4	8.0	8.0	14.0
	<i>Neutral</i>	11	22.0	22.0	36.0
	<i>Agree</i>	18	36.0	36.0	72.0
	<i>Strongly Agree</i>	14	28.0	28.0	100.0
	<i>Total</i>	50	100.0	100.0	

Survey Question No-7: The business organization must practice CSR to improve the social developments

It is proved that CSR activities of different companies of Bangladesh really enhance the social as well as national growth. So every firm should be engaged in CSR actions. From sample of 50 respondents, total 72% respondents become agreed on this where 50% are agreed and 22% are strongly agreed. Beside this, 10% are in neutral side, 8% are disagreed and 1 is strongly disagreed. [This has been shown in the following Table and Graph] [See appendix for table]



Figure 1 The business organization must practice CSR to improve the social developments Frequency

Survey Question No-8: CSR has a direct or indirect impact on the social development of the country as well on it

The different companies of Bangladesh have taken different CSR actions which help it to make more profit and also make society more developed. In the interview, the author has calculated that total 62% respondents has become agree on that issue where only 4 % are disagree and 20% are in neutral position. About 50% respondents said that CSR actives has direct impact in society welfare and 22% become strongly agree that CSR functions like tree plantation, short term loan, scholarship, job opportunities is directly increasing social growth of Bangladesh. [This has been shown in the following Table and Graph]

<i>Table 2 CSR has a direct or indirect impact on the social development</i>					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<i>Valid</i>	<i>Strongly Disagree</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
	<i>Disagree</i>	<i>4.0</i>	<i>8.0</i>	<i>8.0</i>	<i>8.0</i>
	<i>Neutral</i>	<i>10.0</i>	<i>20.0</i>	<i>20.0</i>	<i>28.0</i>
	<i>Agree</i>	<i>25.0</i>	<i>50.0</i>	<i>50.0</i>	<i>78.0</i>
	<i>Strongly Agree</i>	<i>11.0</i>	<i>22.0</i>	<i>22.0</i>	<i>100.0</i>
	<i>Total</i>	<i>50</i>	<i>100.0</i>	<i>100.0</i>	

Survey Question No-9: CSR violates the profit maximization rules. So CSR should be discouraged

It is known that, nothing is good at all. Everything matter has both positive and negative side. Here the author has found that, about 36 respondents become agree that some CSR actions violate the aim of profit maximization, among them 25 are agree and 11 are strongly agree. Because, doing CSR functions requires a high amount of budget which sometimes leads the bank to expend more. Often it is seen that the bank do not get sufficient profit it wants to earn. From rest others, 10 are neutral, 4 are disagreeing and 1 is strongly disagreeing because they think that CSR activities do not violate profit maximization rather increasing.

Survey Question No-11: CSR annihilates the agony of society

Every business organization is part of the society, so it is the responsibility of every company to do good for society. CSR activity can remove social agony by making developments. The author has gathered information of selected 50 samples, where 11 respondents become strongly agreed that CSR actions done by different companies of Bangladesh in educational, environmental, employment, economical sectors are praiseworthy to remove social agony. 25 respondents have agreed that different companies of Bangladesh

can increase social improvement by its CSR functions. About 10 respondents did not say anything in positive or negative. 4 respondents are disagreed and 1 is strongly disagreed regarding this issue. But majority sample are in same opinion that CSR functions can remove social agony by removing poverty, increasing environmental safety, increasing importance of education.

4.2 Qualitative Data Analysis (In depth Interview Analysis)

Objective-one is to discover the CSR initiatives practiced by different companies of Bangladesh, Bangladesh. From interviews about the different CSR initiatives done by the Private Commercial Banks of Bangladesh, in 2010, the company kept budget for doing CSR activities of Tk.15 crore where it spent Tk. 1 crore on CSR actions. But in 2013, there is a significant development made. Banks of Bangladesh spend almost 20 crore on CSR activities which is 5 crore more than 2010. So it is seen that, the Private Commercial Banks of Bangladesh have given more attention on performing CSR activities for society. The analysis implies that these banks usually allocate almost 98 lacs to educational sectors for giving scholarship to poor and bright students, to set up different educational institutions. In the mid-2013, these banks have used about 2 crore to make mass awareness programs regarding environmental safety which is really praiseworthy. According to the interview question the author realized that BRAC Bank is trying to keep contribution on environmental issues, thus it is doing tree plantation, mass awareness program to keep environment clean. It also makes CSR actions in educational sector. But the amount contributed in educational sector is less than the amount given by the Dutch Bangla Bank in educational side. Dutch Bangla Bank launches many ATM booths in many locations to ensure easy convenience. Different companies of Bangladesh should give attention on this issue; it should also increase its amount of ATM booth for making easier for respondents to use anytime. This information is gathered by the authors from the questionnaire's answers given by the employees of those four private Commercial Banks of Bangladesh.

According to the interview question the author realized that how will different companies of Bangladesh influence the CSR practice in the future? From the opinion of employees of those four private Commercial Banks of Bangladesh, the author has come to know that the Private Commercial Banks of Bangladesh should increase its CSR contribution in society in several sectors. It should give more focus on its employee, should provide more benefit than their current rate because when employee become more valued, they will give their best service. On the other hand, different companies of Bangladesh should involve in more mass awareness program regarding environmental issue so that respondents can stop themselves from abusing natural resources. The employees of those four private Commercial Banks of Bangladesh have said that they prefer more Dutch Bangla Bank because of its easy convenience, so

different companies of Bangladesh should give its emphasize on this issue, it should take initiative to set up more ATM booths for respondent's easy convenience.

5.4.2 Study Objective Two

By analyzing the in depth Interview Question No-5 which is do you think Corporate Social Responsibility (CSR) has great potential to bring about substantial social improvements by curtailing certain practices which may harm the environment or the respondents' directly.How?

In the era of societal marketing, every company should keep concern on its society as well as nation's wellbeing. Thus, Corporate Social Responsibility executed in a way which operates for social welfare. CSR practices done by the company can prevent environment abuses by raising mass awareness. Employees of those four private Commercial Banks of Bangladesh have said to author that they have evaluated the CSR actions done by the Private Commercial Banks of Bangladesh, which is really appreciable. Because different companies of Bangladesh raises awareness among respondents to stop polluting water and air, to plant more trees, to keep soil dirty free, to use dustbin, sanitary latrine for keeping environment clean. So CSR activities have great potential to bring substantial social developments by removing bad practices.

In depth Interview Question No-6. How can different companies of Bangladesh improve the living standard of citizen of Bangladesh by CSR practices?

From the in-depth interview, the author has become able to conclude that different companies of Bangladesh improves nation's living standard. By making tree plantation, it keeps environment healthy which remain respondents healthy. By mass awareness program, is more concern to stop unnecessary usage. By giving scholarship to student, these different companies of Bangladesh increase the importance of education among respondents. But different companies of Bangladesh should increase its employee's welfare by giving more salary, rewards or incentives so that employee productivity increases which ultimately keep contribution in the economic growth of Bangladesh.

In depth Interview Question No-8. How does CSR direct or indirect influence on the social development of the country as well on it.

Among respondents participated in depth interview, CSR activities influence on social development of Bangladesh. The first influence is that this tries to keep environment healthy, ever green by tree plantation activities. This makes awareness among respondents in society to plant trees, stops abusing something, encourages sending their children in school, encourages to continue education, makes them understood the importance of education.

In depth Interview Question No-9. "CSR increases the corporate images of any organization." How will you consider the statements?

When anything good is done for society, ultimately inhabitants of that society become grateful to that.

CSR activities are done for society welfare which concurrently increases public image of that company. The author has being informed by the employees that Dutch Bangla Bank make itself more profitable and renowned to respondents by doing a lot CSR activities. Different companies of Bangladesh at first were just involved in profit maximizing activities. After some years, it has started to give concern on performing CSR activities to make it renowned to public by making social developments. At present, different companies of Bangladesh are doing many CSR activities in environmental, educational, employment and economic sectors which raises its corporate image to citizen.

4.3.3.1 Hypothesis for research objective three

Attribute 1: Relationship of CSR activities

Null Hypothesis:

The CSR initiatives practiced by different companies of Bangladesh are not focused on social development only

Alternative hypothesis:

The CSR initiatives practiced by different companies of Bangladesh are focused on social development only

Level of significance: 0.05

Test Statistics:

Test Statistics

	Q4	Q5	Q6	Q7
Chi-Square	.818 ^a	2.273 ^a	2.273 ^a	.091 ^a
Df	1	1	1	1
Asymp. Sig.	.366	.132	.132	.763

a. 0 cells (.0%) have expected frequencies less than 5.

The minimum expected cell frequency is 5.5.

Result: significance $p < 0.05$, the null hypothesis has been rejected.

From the chi square analysis, researcher found that the percentage of response towards the CSR initiatives does not focus on the social development only at present. In the literature review many literature insisted that there are certain practice of the organizations that are done with a different objective other than social development (Varma et al., 2006).

Attribute-2: CSR approaches are one of the main Black Cat of social corruption of stakeholders

Null Hypothesis:

CSR activities of the companies in Bangladesh ensure social development properly

Alternative Hypothesis:

CSR activities of the companies in Bangladesh does not ensure social development properly

Level of Significance: 0.05

Test Statistics:

Test Statistics

	Q11	Q12	Q13	Q14
Chi-Square	.818 ^a	5.091 ^b	.818 ^a	11.636 ^b
df	1	2	1	2
Asymp. Sig.	.366	.078	.366	.003

a. 0 cells (.0%) have expected frequencies less than 5.

The minimum expected cell frequency is 5.5.

b. 3 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 3.7.

Result: Since the significance $p < 0.05$, the null hypothesis have been rejected.

From the analysis, researcher found that the effective scheduling towards the task was about 45% medium. From the table and the pie chart it was understood that the respondents agreed that the CSR activities that are done by the companies are not enough to ensure social development in general and properly. In case of conducting the social development the entire goal should be focused on the enhancement of the social development only not any other goal. But in case of the organizations they have multiple goals in conducting their CSR activities as a result the main goal of social development does get achieved in most of the cases.

Attribute-3: Proper CSR initiatives do influence over the goal of the business and the environment there is

Null Hypothesis:

There is a level of corruption in the CSR initiatives of the companies in Bangladesh

Alternative hypothesis:

There is not any level of corruption in the CSR initiatives of the companies in Bangladesh

Level of Significance: 0.05

Test statistics:

Test Statistics

	Q16	Q17	Q19
Chi-Square	.091 ^a	.818 ^a	.091 ^a
df	1	1	1
Asymp. Sig.	.763	.366	.763

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 5.5.

Result : significance $p > 0.05$, the null hypothesis has been accepted.

Researcher found that the response indicates that there is a level of corruption in the practise of the initiatives that are taken by the companies of Bangladesh. With the test of the hypothesis along with the data analysis it is eminent that the presence of corruption in the CSR practise of the organizations are reality. The corruption may not happen directly but there is a level of manipulation that occurs through the CSR activities of the organizations. The CSR activities should be focused on the social development only not any other objective or hidden agenda of the organization.

5. The Major Findings

Findings of the report is that though there are significant amount of CSR activities adopted by the organizations may have some benefits but in general there are some hidden goal of the organization to promote the product in terms of the social development (Chia, 2006). The personal funding occurs through the fund that has been allocated to the funding of the CSR activities. Apart from that there are significant amount of corruption in the practice of the CSR are made and it does not cater to the social development only (Lewis, 2010).

In case of CSR of the organization there is a level of corruption that is present in the organization. As a result the CSR activities of the organizations are not solely focused on the social development rather it may involve with black cat activities of the society. Collins (2008) argued that the implication and presence of corruption is present in the various practices of CSR. For example there are common tendency of the companies to give scholarship and charity events but there are reports where the CSR activity does not give proper fulfillment of the payment thus conducting corruption through the process.

There are various aspects where the CSR of the organization is not up to the standard. As the report finds that the response indicates that there are various standard issues indicating the activities done by the

organization do not imply in the perspective of the standard of the activities as a result there are various issues regarding the standard of the CSR activities Godfrey, 2006).

From the report it has been found that there are evidence that the organizations often uses the funding that has been allocated for the CSR of the organization is used in other factors such as organization utilizes those CSR funding in case of donating to use money in various political parties. (Hoffman, 2011) argued apart from that those organization that are backed up by political affiliation and has their own political group then they utilizes those CSR money in case of supporting and developing the political group instead of developing the society.

There have been allegations regarding various Banks that are governing under the authority of foreign involvement have been subject to investing the CSR money in various terrorism based activities. (Goldstein, 2008) stated hence there are other version of that scenario, but the point is whether the incident is true or not or whether the organization is foreign governed or not many organization uses money of CSR in the political terrorism to gain power and so on which is also a violation of the CSR rules.

The metaphorical indication of the black cat in the CSR indicates that the organizations that does CSR in general then the aspects that should be kept hidden and not addressed that the CSR activities of the organization. (Collins, 2005) identified the black cat is the indication that there are some aspects that the organization can address though giving an eye wash regarding the aspect that the organization covers under the banner of CSR. But there is hue and cry that has emerged that there are some levels of faulty aspect of the CSR activities.

In today's age of holistic marketing, most of the banks are engaged in performing CSR activities. Different companies of Bangladesh are not the exception one. different companies of Bangladesh has also keeping its attention in performing CSR functions in different sectors including- Environmental sector, Educational sector, Employment sector, Economic sector, Social sector, Cultural sector. So from this finding of the author, it can be cleared that the objective 1 mentioned in chapter 1 is well-fulfilled.

Higher budgets for estimated for CSR activities by different companies of Bangladesh. Every year different companies of Bangladesh have been keeping a fixed amount for performing CSR functions. In the year of 2010, the bank was allocated 15 crore where it expended 1 crore in different CSR sectors it has decided to serve. In the year of 2011, the bank has expended 25 crore in these CSR sectors which is great contribution by the Bank and 30 Crore in 2012. The bank has focusing on the importance of education, thus it has issued 98 lacs money on the purpose of giving scholarship to students to make them interested in education. The bank has also given attention on making mass awareness program where it allocated 2 crore for this purpose. The author's this finding is completely similar with the objective 1 mentioned in chapter 1.

The improvement of environmental sector by different companies of Bangladesh's CSR practices. Different companies of Bangladesh are doing a great job in case of keeping environment fresh by its CSR actions. The bank has been making program of tree plantation to increase interest and importance among respondents of planting trees for keeping environment healthy. The bank has also focusing itself in making awareness among respondents to stop themselves from unnecessary cutting trees and making them understood the bad impact of cutting trees on the nature and also the human life. So different companies of Bangladesh has been keeping a great contribution in making environment ever green and keeping healthy. The author's this finding is completely similar with the objective 2 mentioned in chapter 1.

It is true that different companies of Bangladesh have been providing financial incentives to make its employee happy with the work and for motivating them so that they can provide their best service. But the contribution the bank has made to its employee is not enough and is not satisfactory compared to other banks. So from this finding of the author, it can be cleared that the objective 2 mentioned in chapter 1 is well-fulfilled.

Almost all the bank is doing CSR actions to improve the country's economy besides attaining their own profit maximization objective. Different companies of Bangladesh has been providing different type of short term loan to poor respondents of our country and influences them to be engaged in some work using that loan, recently the bank has been providing small and medium loan to poor women, so that they can start their own business or do some work. This contribution of different companies of Bangladesh is reducing the unemployment rate of the country which ultimately keeping great contribution in the economy by increasing the productivity of new employed respondents. Author's this findings is matched with the objective 2 mentioned in chapter 1.

Every type of business works in particular society. So this society should be improved by that business's contribution. Different companies of Bangladesh are performing different types of CSR actions to improve the condition of the society. So from this finding of the author, it can be cleared that the objective 2 mentioned in chapter 1 is well-fulfilled.

Overall direct impact of CSR of the Private Commercial Banks of Bangladesh in social development: different companies of Bangladesh are keeping great contribution for the social development of the country. The bank has been making respondents aware to keep environment clean, to stop abusing natural, social resources. By giving scholarship, the bank is increasing the importance of education among respondents. So the Bank should increase its number of ATM booths to increase easy convenience and to give quick response to its customers anytime when necessary. Author's this findings is matched with the objective 2 mentioned in chapter 1.

Living standard of by CSR is increasing: With the social development, the Private Commercial Banks of Bangladesh is improving the life standard of Bangladeshi respondents. The bank is teaching respondents to engage in tree plantation activities to keep environment and also themselves healthy. With the arrangement of mass awareness program the bank is raising concern among respondents to stop unnecessary wastages. The bank's performance will be higher if the employees do their best. So the bank should motivate its employee by some financial rewards, additional salary etc. The author's this finding is completely similar with the objective 3 mentioned in chapter 1.

Increasing corporate image to better increase the life standard of respondents through CSR actions: different companies of Bangladesh is increasing its corporate image among respondents both in home and foreign country by doing CSR activities for the development of society. The bank is increasing its public image by doing better activities in sphere of educational, economic, environmental and social sectors. By this, the bank has been made itself able to attract foreign investors and different private organizations for making investment here. When the investment rate increases, the bank will be able to allocate more budgets on giving scholarship, on giving more short and medium sized loan which finally lead the respondents of Bangladesh to enjoy a better life. So from this finding of the author, it can be cleared that the objective 3 mentioned in chapter 1 is well-fulfilled.

5. BEST Model of CSR

BEST Model of CSR

The authors have developed a model known as **BEST** Model of CSR on the basis of the findings of Project “the Impact of Corporate Social Responsibility for Improving the Social Development of the Citizen: A Case Study on Private Commercial Bank of Bangladesh.” The model has been portrayed in the following:

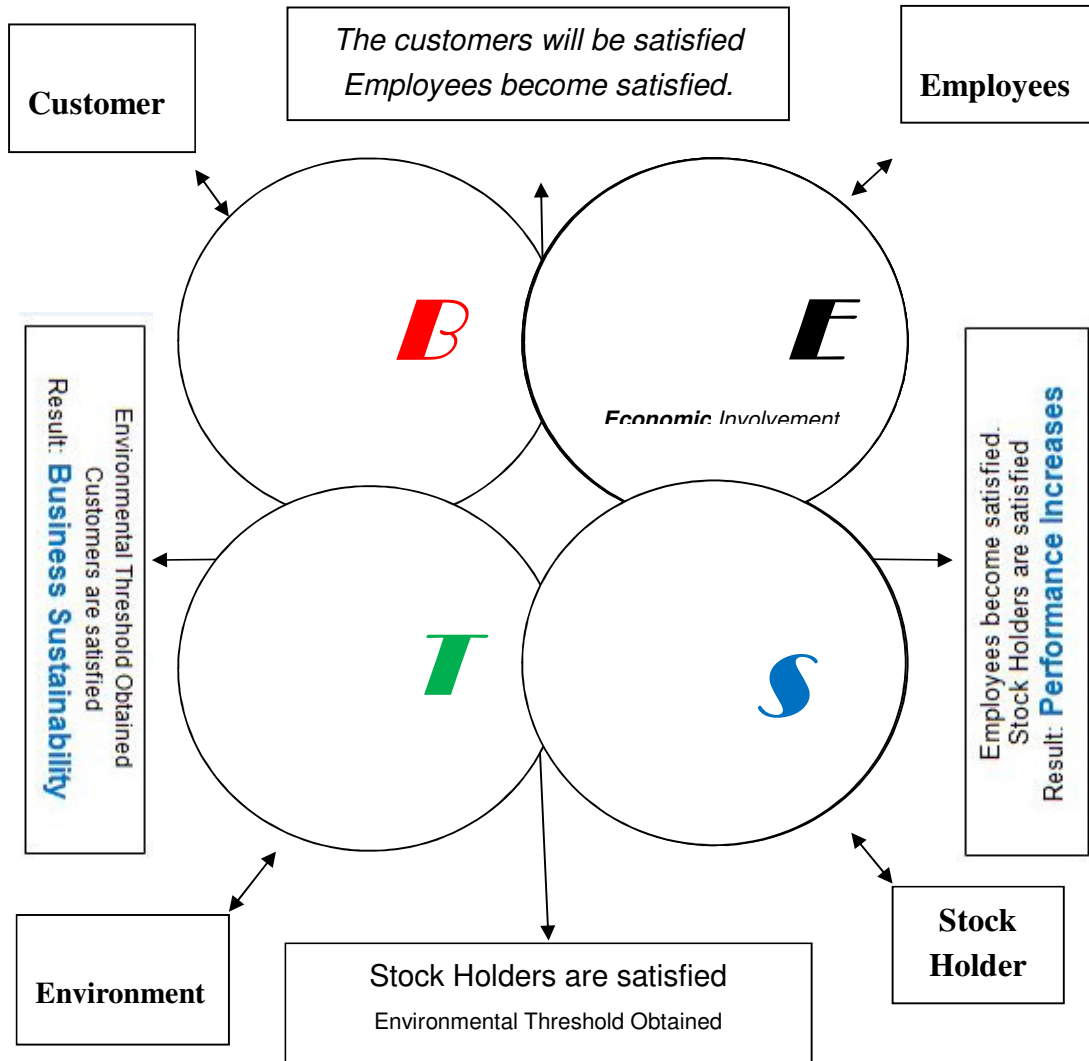


Figure 2: BEST Model of CSR

Source: Developed by the authors

The authors have described to improvement CSR activity of Private Commercial Banks of Bangladesh should have follow The Four Activities which are involved with basic four dimensions of CSR. The activities are described in the following:

1. B stands for Business Practice of an origination. Here the authors' mean that CSR activities are not the philanthropy activities rather the activities are the Business Practice of the Organizations. However, this business practices should be performed toward to Customers of the Organization. This means that as the business organizations produce their products for the customers, they should have the CSR activities as a complementary feature of their products. Thus, the customers will be satisfied

2. E stands for Economic Involvement of an origination. The employees are the human resources of organizations and they worked for the organizations. However, the organization should have involved in such a way so that the employees of the organization become satisfied with the organizations.

3. S stands for Stock Holder Solidity Practice of an origination. If an organization involved in such kind of CSR activity in the way of solid and honest fund distribution to the stockholders on time. The stockholder will be satisfied. There would increases the Capital Investment.

3. T stands for Environmental Threshold of an organization. This is a (ecology) a point that, when crossed, can bring rapid and sometimes unpredictable change in a trend. An example would be the sudden altering of ocean currents due to the melting of ice at the poles. If the organizations continue to practice in these sectors, it is possible to obtain the Green environment which is livable to all. Thus, the by these sectors' CSR practices the organization will be able to obtain business Sustainability.

6. Recommendations and Conclusions

6.1 Recommendations

The recommendations are given in the following:

Consumer Education: The Private Commercial Banks of Bangladesh should provide commercial free and professional financial knowledge to help consumers understand financial investment and associated risks.

The process of CSR should be modified and there should have strong monitoring system

Education and Social Development: The Private Commercial Banks of Bangladesh must believe that education is crucial to the development and prosperity of every country. By supporting education in Bangladesh, The Private Commercial Banks of Bangladesh should seek to contribute to nurturing talent for Bangladesh's future success.

Ethical Banking: Ethical banking should be The Private Commercial Banks of Bangladesh's approach to lending and investment that follows guidelines set by international standards. This approach takes into consideration society's expectations and the interests of future generations.

Environmental Protection: The environment is the foundation for sustainable business. Protecting the environment is a key CSR focus of The Private Commercial Banks of Bangladesh.

Corporate Governance: The Private Commercial Banks of Bangladesh should adopt corporate governance which means maintaining a high level of integrity and transparency in the way we conduct our business. This involves providing timely and accurate disclosure of information for our stakeholders.

The Private Commercial Banks of Bangladesh Climate Partnership: The Private Commercial Banks of Bangladesh should help to tackle climate change with a four-year, global programme of the The Private Commercial Banks of Bangladesh should Climate Partnership.

6.2 Conclusions

CSR is not only about charitable donations, the environment or society, but also about making decisions that maintain the right balance between the environment, society and the Bank's business. The Private Commercial Banks of Bangladesh is committed to the Group's emphasis on education, the environmental protection and support of local communities. The Private Commercial Banks of Bangladesh CSR activities also focus on social development, staff volunteering, consumer education and ethical banking. CSR initiatives practiced by The Private Commercial Banks of Bangladesh, detect the impacts of Corporate Social Responsibility (CSR) for improving the Social Development of the citizen and to analyze the issues by which The Private Commercial Banks improve the living standard of citizen of Bangladesh. The author has been able to achieve his objective four by proposing a model which is known as **BEST Model of CSR** in this study.

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9. Appendices

9.2 Appendix: List of Abbreviations

- BP = British Petroleum
 CSR = Corporate Social Responsibility
 DR = Deductive research
 DUCECP = Dhaka Urban Comprehensive Eye Care project
 FGD = Focus Group Discussions
 ISO = International Standard Organization
 MDG = Millennium Development Goals
 N.G.O = Non Government Organizations
 PS = Probability sampling
 PSR = Primary sources of Data
 QDA = Qualitative Data Analysis
 QDA = Quantitative Data Analysis
 RP = Research Philosophy
 RS = Random sample
 SPSS = Statistical Package for the Social Sciences
 TNC = Transnational companies
 HR = Human Resource

Table 1 Statistic Table-2				
		The CSR initiatives practiced by different companies of Bangladesh Limited	CSR has a direct or indirect impact on the social development	CSR has a direct or indirect impact on the social development
<i>N</i>	<i>Valid</i>	50	50	50
	<i>Missing</i>	0	0	0
<i>Mean</i>		5.58	4.00	3.92
<i>Std. Error of Mean</i>		.492	.137	.110
<i>Median</i>		6.50	4.00	4.00
<i>Mode</i>		1	5	4
<i>Std. Deviation</i>		3.482	.969	.778
<i>Variance</i>		12.126	.939	.606
<i>Skewness</i>		-.091	-.561	-.399
<i>Std. Error of Skewness</i>		.337	.337	.337
<i>Kurtosis</i>		-1.362	-.732	-.048
<i>Std. Error of Kurtosis</i>		.662	.662	.662
<i>Range</i>		11	3	3
<i>Minimum</i>		1	2	2
<i>Maximum</i>		12	5	5

<i>Sum</i>	279	200	196
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Table 2 The CSR initiatives practiced by different companies of Bangladesh					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<i>Valid</i>	<i>Strongly Disagree</i>	2	4.0	4.0	4.0
	<i>Disagree</i>	1	2.0	2.0	6.0
	<i>Neutral</i>	12	24.0	24.0	30.0
	<i>Agree</i>	29	58.0	58.0	88.0
	<i>Strongly Agree</i>	6	12.0	12.0	100.0
	<i>Total</i>	50	100.0	100.0	

Table 3 CSR has a direct or indirect impact on the social development					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<i>Valid</i>	<i>Strongly Disagree</i>	0.0	0.0	0.0	0.0
	<i>Disagree</i>	4.0	8.0	8.0	8.0
	<i>Neutral</i>	10.0	20.0	20.0	28.0
	<i>Agree</i>	25.0	50.0	50.0	78.0
	<i>Strongly Agree</i>	11.0	22.0	22.0	100.0
	<i>Total</i>	50	100.0	100.0	

Table 4 CSR has a direct or indirect impact on the social development					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<i>Valid</i>	<i>Strongly Disagree</i>	1.0	2.0	2.0	2.0
	<i>Disagree</i>	4.0	8.0	8.0	8.0
	<i>Neutral</i>	10.0	20.0	20.0	28.0
	<i>Agree</i>	25.0	50.0	50.0	78.0
	<i>Strongly Agree</i>	11.0	22.0	22.0	100.0
	<i>Total</i>	50	100.0	100.0	

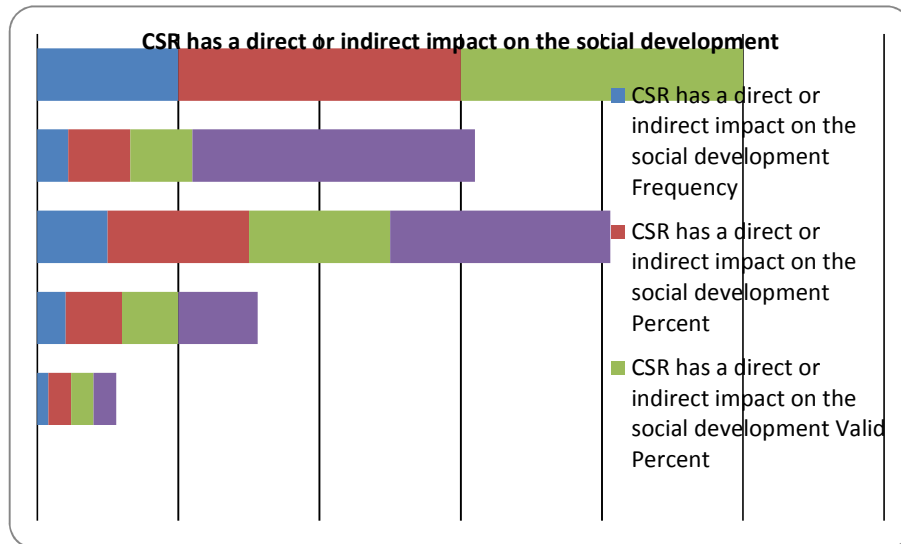
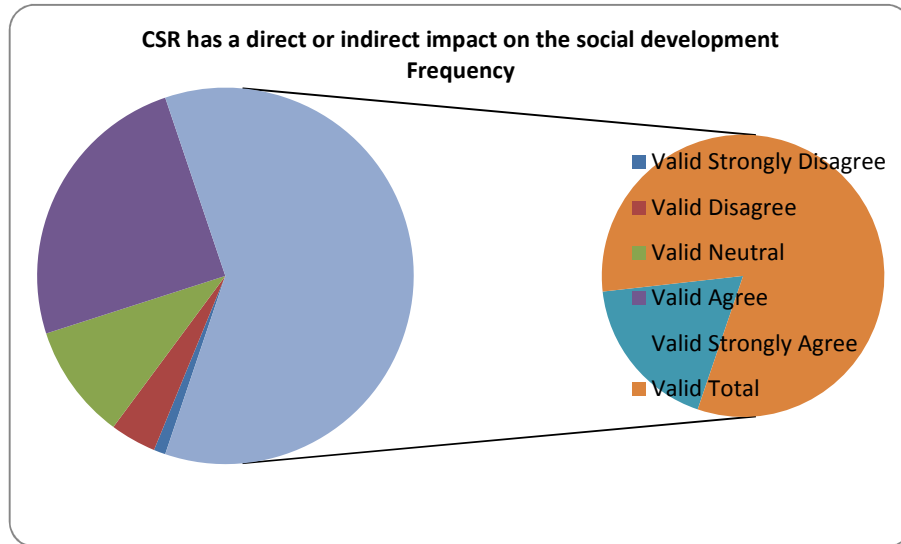


Figure 3 Statistics-3

		<i>CSR has a direct or indirect impact on the social development</i>	<i>CSR is a rising issue for Social development</i>	<i>CSR of different companies of Bangladesh increases the Living Standard of Citizens of Bangladesh</i>	<i>CSR is creating the job opportunities for the citizens of Bangladesh</i>	<i>CSR is improving the environment of Bangladesh</i>
<i>N</i>	<i>Valid</i>	50	50	50	50	50

	<i>Missing</i>	0	0	0	0	0
<i>Mean</i>		3.90	3.96	4.18	2.76	3.34
<i>Std. Error of Mean</i>		.125	.086	.074	.113	.097
<i>Median</i>		4.00	4.00	4.00	3.00	3.00
<i>Mode</i>		4	4	4	2	4
<i>Std. Deviation</i>		.886	.605	.523	.797	.688
<i>Variance</i>		.786	.366	.273	.635	.474
<i>Skewness</i>		-.714	.015	.221	.466	-.564
<i>Std. Error of Skewness</i>		.337	.337	.337	.337	.337
<i>Kurtosis</i>		.967	-.114	.296	-1.264	-.728
<i>Std. Error of Kurtosis</i>		.662	.662	.662	.662	.662
<i>Range</i>		4	2	2	2	2
<i>Minimum</i>		1	3	3	2	2
<i>Maximum</i>		5	5	5	4	4
<i>Sum</i>		195	198	209	138	167

Table 5 CSR has a direct or indirect impact on the social development

		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<i>Valid</i>	<i>Strongly Disagree</i>	1.0	2.0	2.0	2.0
	<i>Disagree</i>	4.0	8.0	8.0	8.0
	<i>Neutral</i>	10.0	20.0	20.0	28.0
	<i>Agree</i>	25.0	50.0	50.0	78.0
	<i>Strongly Agree</i>	11.0	22.0	22.0	100.0
	<i>Total</i>	50	100.0	100.0	

UNDERSTANDING THE ASPECTS OF CULTURAL SHOCK IN INTERNATIONAL BUSINESS ARENA

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ABSTRACT

Cultural Shock is an experience of trauma when the culture transition is felt home culture. It is a communication problem that involves the frustrations of not understanding the verbal and non- verbal communication of the host culture- its customs and value systems. It is no surprise that cultural shock can cause many problems with an employee's comfort level, particularly, in corporate inter personal relationship responses, leading to psychological stress. The psychological stress is an outcome of adaptability to major differences in lifestyles, living conditions and business practices in another cultural setting that the disrupt the employee's routines and comfort levels leading to anxiety and frustration in workplace. In this paper an attempt is made to understand the nature of cultural shock and its aspects, to identify the typical stages of cultural shock and based on these evaluations, suggestions are proposed to alleviate and minimize cultural shock in the international business arena.

Key Words: Cultural Shock, International Business

The Nature of Culture Shock

“Culture Shock”, a term popularized by anthropologist *Kalvero Oberg*, refers to the psychological disorientation experience by people who suddenly find them living and working in radically different cultural environments. *Oberg (1960)* describes culture shock as the anxiety that results when all familiar cultural props have been knocked out from a person who is entering into a new culture. Culture shock ranges from mild irritation to a deep-seated psychological panic or crisis. It usually carries with it the feelings of helplessness and irritability, while producing fears of being cheated, injured, contaminated or discounted. Both social scientists and laypeople use the term culture shock to define in very broad terms the unpleasant consequences of experiencing a foreign culture. According to *Oberg (1960)*, the culture shock involves the following dimensions: A sense of....

- *Confusion over expected role behavior*
- *Surprise*
- *Loss of the old familiar surroundings and cultural patterns*
- *Being rejected*
- *Loss of self-esteem*
- *Feeling impotence at having little or no control over the environment*
- *Strong sense of doubt when old values are brought into question*

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Robert Kohls (1984) and Elizabeth Marx (1999) provide a fairly comprehensive list of the some major symptoms that have been observed in relatively severe cases of culture shock:

- *Homesickness*
- *Boredom*
- *Need for excessive amount of sleep*
- *Tenseness, moodiness, and irritability*
- *Marital stress*
- *Hostility toward host nationals*
- *Feelings of isolation*
- *Loss of confidence*
- *Loss of ability to work effectively, etc...*

Because culture shock is characterized by a large and diverse set of symptoms, the malady is frequently difficult to predict and control. It is important to point out, however, that not every employee will experience all the symptoms, but almost all employees will experience some or other. Moreover, some symptoms, or combination of symptoms will vary in severity as the case may be. The anxiety of culture shock can interpret work patterns, increase the number of bad solutions to problems and impair decision making, planning, and personal relationships in one's overseas assignments. Ironically, some of the personality characteristics traditionally considered positive for business people at home are the very traits that can most readily contribute to culture shock. Although most international businesspeople will anticipate a certain number of problems and discomforts when entering a new cultural environment that are frequently unprepared for the myriad of problems especially while returning home. Moreover, culture shock encourages the sufferers to confront their own cultural heritage and to develop a new awareness.

Aspects of Cultural Shock

Aspects of Cultural Shock include *cultural stress, social alienation, social class -*

Poverty/wealth extremes, financial matters, relationships and family considerations .

In addition, differences between the extent to which persons in the host and home cultures reveal their private selves may cause acculturation problems, particularly in communication.

Cultural Stress

Entering an unfamiliar culture is stressful; in fact, transitions of any type are both psychologically and physically stressful. Expatriates learn to use a variety of coping skills to alleviate stress. Some companies have found that providing prospective expatriates with a mentor who has worked in the host country can help reduce anxiety about adjustments that may be necessary in the new culture. Above all, maintaining a sense of humor is very important in dealing with cultural stress.

Social Alienation

Feelings of alienation may be delayed somewhat because concern over such basic matters as housing, transportation and work may buffer these feelings initially. Making an effort to become familiar with the nuances of the culture and cultivating friendships with colleagues from the home culture as well as the host culture can alleviate feelings of alienation like enrolling in language classes and entertaining

programs pave the way toward a better understanding and appreciation of their colleagues' culture.

Social Class and Poverty/ Wealth Extreme

Social Classes and extremes in poverty and wealth are readily apparent. According to people in the lower stratum class, is related monetary value. People in the middle stratum acknowledge the economic implications but still value the work expertise and education. People in the top stratum believe that our tastes, values, styles and behaviour indicate the class, regardless of education, occupation or money (Fussell, 1983). Mentors in the host culture can be very helpful in advising the employees in the organisation regarding acceptable ways of dealing with poverty/wealth extremes and with gaining an insight into the class structure of the culture.

Financial Matters

Adapting to a new culture and reentering the home culture does involve financial adjustments and corporate should provide financial counseling (i.e. information as cost and availability of housing, banking practices and costs involved for schooling for employee's children and cost of maintaining the family) both to expatriates and repatriates. Although the focus is a little different, the primary consideration is the same; optimum use of the financial resources available. Because substantial salary increases are often related to an employees' willingness to relocate, these increases should be discussed in terms of real purchasing power. By providing counseling before home country re-entry, the company is acknowledging that financial problems will occur and is demonstrating a willingness to support to overcome financial problems. The focus of financial counseling for repatriates includes costs involved in relocating in a stateside home, accompanying adjustments to a lower salary and the loss of perquisites. To ease the transition financially, some companies provide a relocation pay supplement, particularly children whose adolescence is delayed. Because repatriated children are usually retarded three to four years socially, counseling is often needed to help them work through this transition of readjusting to the home culture (Bird & Dunbar, 1991).

Relationships and Family considerations

Problems with relationships, such as the failure of the spouse and other family members to adapt to the new culture, are a major factor in the early return of expatriates. Family and personal issues can be disruptive to acculturation, especially for families with children ages 3 to 5 and 14 to 16 (Harvey, 1985). Care must be taken to prepare children for the move by discussing openly their anxieties and fears and by providing them with information concerning expected changes in their lives. Two- career families in which one spouse (usually the wife) gives up a career to accompany the relocated spouse pose special adjustment problems. Job opportunities in the new culture may be nonexistent, and resentment and boredom may lead to family conflict. Adding unhappy children and an unhappy spouse to the stress of the new job in a foreign culture increases the probability of an early return to the home culture (Harvey, 1985). Companies that provide training for employees prior to departure rarely include the family in such training. Because adjustment problems often involve the family, difficulties could be avoided in many cases by including family members in pre-departure training.

Stages of Cultural Shock

Cultural shock generally goes through five stages: excitement or initial euphoria, crisis or disenchantment,

Adjustment, Acceptance and Reentry. *Davis and Krapels (2005)* visualize cultural shock as being represented by a U- shaped curve, with the top of the left side of the curve representing the positive beginning, the crisis stage starts down the left side to the base of the U, the adjustment phase starts at the base of the curve, then acceptance moves up the right side of the curve, and reentry into the original culture is at the top of the right side of the curve.

The *first stage* is *excitement and fascination* with the new culture, which can last only a few days or several months. During this time, everything is new and different; the employees are fascinated with the food and the people. Sometimes this stage is referred as the “Honeymoon” stage (*Black et al., 1999*).

During the *Second stage, the crisis or disenchantment* period, the “honeymoon” is over; the employees excitement have turned to disappointment as you encounter more and more differences between their own culture and the new culture. Problems with transportation, unfamiliar foods and the people who do not speak English now seem overwhelming. Employees at this stage often cope with the situation by making disparaging remarks about the culture; it is sometimes referred to as the “fight-back” technique.

In the *third stage*, the adjustment phase, the employees begin to accept the new culture or they return home. Employees try new foods and make adjustments in behavior to accommodate the shopping lines and the long waits for public transportation. They begin to see the humor situations and realize that a change in attitude toward the host culture will make the stay abroad more rewarding.

In the *fourth phase*, the acceptance or adaptation phase, employees feel at home in the new culture, become involved in activities of the culture, cultivate friendships among nationals and feel comfortable in social situations with people from the host culture. Employees learn language and may adopt the new culture’s style of doing things.

The *final phase* is reentry shock, which can be almost as traumatic as the initial adjustment to a new culture, particularly after an extended stay abroad. Many individuals are shocked at the fact that they feel the same emotional, psychological, and physiological reactions they did when they entered the new culture. Reentry shock is experienced on returning to the home country and may follow the stages identified earlier: initial euphoria, crisis or disenchantment, adjustment and acceptance or adaptation. The employees would first be happy to be back home but then become disenchanted when it is realized that the friends are not really interested to hear about overseas experiences , the standard of living goes down, and the hard earned skills as knowledge foreign language really do not earn bargain power in the market.

In research conducted by *Chaney and Martin (1993)*, the four types of reentry shock experienced by college students who had travelled abroad were statistically significant- adjusting to lifestyle, readjusting to changes in social life, readjusting to changes in standard of living, and reestablishing friendships. Many repatriates have found that maintaining ties with the home culture cushions the shock associated with reentry (*Dodd, 1977*).

Therefore, it is imperative that employers put repatriates into realistic positions upon their return. Some reentry problems are personal in nature. Many repatriates have changed; they have acquired a broadened view of the world and have undergone changes in values and attitudes. Because reentry shock is a natural

part of cultural shock, multinational corporations must provide training for repatriates to ensure that the transition to the home culture is a favorable experience.

Alleviating Cultural Shock

Many multinational firms find that cultural shock can be alleviated by selecting employees for overseas assignments who possess certain personal and professional qualifications. Employees who have been given feedback on how they are doing and who have been developed to their maximum potential will be more satisfied with their assignments. Another method of easing cultural shock is to conduct training programs for employees prior to overseas deployment (*Krapels, 1993*).

Selecting Overseas Personnel

Careful selection of employees for overseas assignments is important to enhance the chances for a successful sojourn. Personal Qualifications needed when working in an unfamiliar culture include adaptability, flexibility, empathy and tolerance. Good interpersonal and high self-esteem are also important. Usually, recruiters think that tolerance can be developed but adaptability is difficult to develop; they prefer, therefore, to hire employees who have already acquired this trait through living abroad (*Geber, 1992*). Adaptability screening reduces costly turnover. *Harvey (1985)* suggests some of the use of the following questions to determine a candidate's adaptability:

- Is the employee open to the opinions of others?
- Is the employee patient when dealing with problem situations?
- Is the employee resilient when faced with adverse situations?
- How does the employee react to criticism?
- Is the employee cooperative, agreeable and sensitive to others? etc.

The ability to see the environment from the perspective of the host nationals is an indication of empathy. *Benett's* concept of empathy recommends replacing the Golden Rule (do unto others as would have them do unto self) with the Platinum Rule (do unto others as they would have done unto self). Employees can still maintain their cultural identity but be able to interpret the new culture through the eyes of the national (*Broome, 1991*). An individual success or failure is tried to qualities such as self-efficacy, prior international experience, age, cross- cultural fluency, interpersonal skills, flexibility, cultural sensitivity and adaptability. Therefore, Socio-cultural adjustments are helped if the host country people see the sojourner as a positive rather than a negative addition. Socio-cultural training is very important to the success of this adaptation (*Davis & Krapels, 2005*).

Providing Pre departure Training for Host Country

An effective approach to cross-cultural training is to first explore how employees adjust to new cultures. Learning principles that affect the success of training programs for global managers can be broken into three steps: *Observing and emulating behaviors of employees in the host culture, retaining what has been learnt and experimenting with the new behavior until it becomes comfortable* (*Black, Gregersen & Mendenhall, 1992*).

Global educational networks with various universities are being developed to train executives who are going abroad. Computers are being used to enhance training effectiveness. Computer-aided training or learning has immense potential for multicultural education because it cuts across traditional language

barriers (*Harris et al., 2004*).

Approaches to intercultural training may be grouped as follows (*Lilian H. Chaney & Jeanette S. Martin (2008)*):

- *The intellectual model (Class room model)* is based on the belief that cognitive understanding is necessary for performing effectively on overseas assignment.
- *The area training model (Simulation Model)* is Centered on the trainee rather than the trainer that requires the involvement of the trainee in the learning process and emphasizes problem solving rather than acquiring information.
- *The self- awareness model(Human Relations Model)* is Based on the assumption that the trainee will adapt to the new culture better with self-understanding and will therefore be more effective in the overseas assignment.
- *In the cultural awareness mode the* Participants recognize their own values to the contrasting their values with those of other cultures, using a variety of techniques, that include realistic role playing.
- *The interaction approach is* Based on participants' interacting with people in the host country, either nationals or home country people who have been in the host country for an extended time (*Harris & Moran, 2004*)
- *The multidimensional approach is* Based on the concept that using any single training approach is not as effective as using an approach that attempts to combine cognitive, affective and behavioral aspects of training.

Providing Feedback & Rewards

Global Managers need feedback and rewards just as managers in the home culture do. The appraisal and rewards system is different from the home system because employees in overseas assignments have to be evaluated and rewarded in a way that takes into account the values of persons in the host culture and the expectations of the particular assignment. The evaluations criteria must be made clear. Many companies use a rating team headed by a senior human resources management executive. Persons who may be involved in the appraisal process include on-site superiors, peer managers, subordinates, and clients. The team leader might be expected to prepare an appraisal on the global manager every six months (Black et al., 192). Reward systems used for global managers need to take consideration the idea of equity- the ratio between what they contribute and what they receive.

Developing Employees to their Maximum Potential

In fact, an estimated 20% of managers leave the firm within a year following repatriation (*Lilian H. Chaney & Jeanette S. Martin (2008)*). The significance of focusing on repatriation becomes clear when the firm's investment on creating successful global managers. Plans for successful repatriation adjustment should begin before the manager leaves the host country; the company should make clear the reason for the new assignment, what new skills and knowledge will be learnt, and how the employee will contribute to the company's development upon his or her return. In addition, human resources department personnel

should begin initial preparations for the manager's return at least six months prior to repatriation by providing home country information and contacts. Other recommendations for successful repatriation include providing appropriate compensation for transition expenses, allowing sufficient time to move and get settled before reporting to work, assisting in the location of proper housing and showing appreciation to the entire family for their contributions to the company during their overseas assignment (Black et al., 1992).

Minimizing Culture Shock

Some people simply do not have the desire, inclination, or temperament for international business. One very effective way of totally avoiding culture shock is to choose to stay at home rather than enter the international arena as there may be others who are suited for some foreign cultures. Yet those must live and work in a foreign culture for a year or two are faced with new ways of behaving, thinking and communicating. The international businessperson who is most likely to do well abroad is the person who *i) has a realistic understanding of the problems and promises of international business, ii) possesses a number of important cross-cultural coping skills, and iii) sees the world marketplace as providing vast opportunities for professional and personal growth.* Those who can't meet these criteria may be so ill-suited to working in an international business setting that they would be virtually unable to overcome the more deleterious effects of culture shock.

For those who do select the international business arena, the best single piece of advice for minimizing culture shock is to be prepared. The more thorough the preparation for an overseas assignment, the fewer surprises there will be the accumulated negative effect. Understanding the cultural environment constitutes the cornerstone of the Cognitive Approach. To prepare for an international business encounter, it really suggests a *fourfold approach*:

- 1. General understanding of the concept of culture can provide a fuller appreciation of others cultures, regardless of where one might be conducting business.*
- 2. A second way of preparing for culture shock is to become familiar with local patterns of communication, both verbal and non-verbal.*
- 3. It involves a healthy dose of cultural self-awareness.*
- 4. It is important to become familiar with as much specific cultural information as possible about the country or countries with which one is conducting business.*

By conscientiously pursuing these four content areas- the international businessperson will have touched on the major areas of cultural knowledge, thereby avoiding total alienation and some of the more debilitating consequences of culture shock.

Some of the Suggestions for reducing culture shock and enhancing the International Business experience may summarized as follows:

1. Understand that learning about the host culture is a process that continues throughout the stay in the host culture and beyond.
2. On arrival , become familiar with immediate physical surroundings of new environment
3. Within the first several days of arrival, work on familiarizing with some of the basic, everyday survival skills that the host take it for granted.

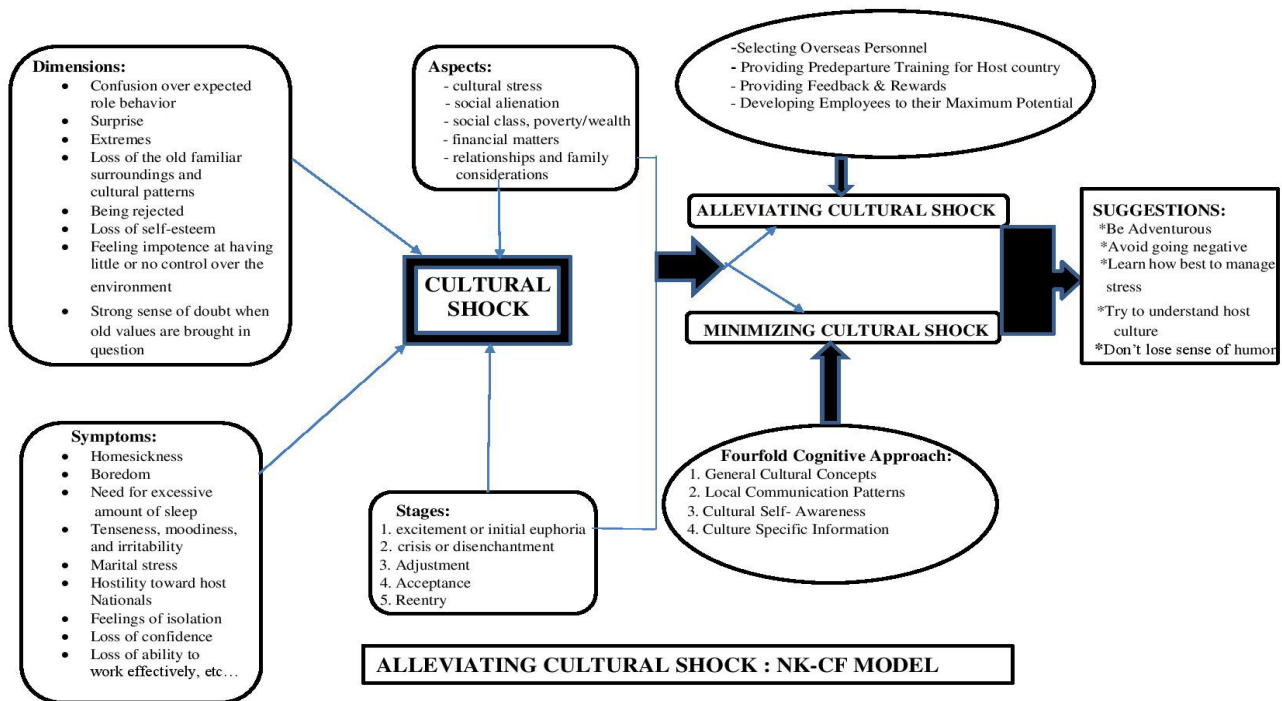
4. As difficult as it may be try to understand host's culture rather than self.
5. Particularly in the beginning, learn to live with the ambiguity of not having all the answers.
6. Understand that flexibility and resourcefulness are key elements to adapt to a new culture.
7. Don't lose the sense of humor.
8. Avoid going negative.
9. Be adventurous.
10. Learn how best to manage stress.

Therefore, it is suggested that to be certain, no bottled remedies for culture shock are to be found at the pharmacy. The anxiety resulting from trying to operate in a different environment is normal. But it is also important to remain realistic. For whatever reason, some will not become close friends while others, purely for personal reasons, will not like and vice-versa and some of the things may never be understood. But once these problems are understood, while real and frustrating, are perfectly normal reactions for any sojourner, then a begin for solution search may be attempted.

Conclusion

Based on the above discussion the following conceptual model could be concluded for an effective understanding of the aspects and coping with cultural shock in international business scenario.

A CONCEPTUAL FRAMEWORK FOR UNDERSTANDING THE ASPECTS AND COPING
WITH CULTURAL SHOCK IN INTERNATIONAL BUSINESS ARENA



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ADOPTION OF ELECTRONIC HUMAN RESOURCES MANAGEMENT (E-HRM) TECHNOLOGY IN PALESTINE

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Abstract

Electronic human resource management (e-HRM) technology has been an impressive subject in light of rapid technical progress in this global networking era. Management of human resource in an organization can work smoothly when e-HRM technology is adopted properly. This study aims to investigate the factors affecting the adoption of e-HRM technology in the Palestinian service sector. Such investigation was based on the extension of many models available in the literature, namely, technology acceptance model (TAM) with theory of planned behavior (TPB), Yale model of communication and persuasion, perceived risk, social risk and organizations role. To this end, pertinent data from banking, governmental, health care, insurance, internet providing, logistics, telecommunication and academic organizations working in Palestine, was gathered via questionnaires and interviews. The analysis of collected data indicates that perceived ease of use, attitude, intention, and communication are the most significant factors influencing e-HRM technology adoption in the targeted organizations. On the other hand, perceived risk, system security, organization's role, and availability of resources are found to be less influential factors on e-HRM technology adoption.

Keywords: electronic human resources management (e-HRM) technology, Palestinian service sector, Technology Acceptance Model, Theory of Planned Behavior, Yale Model.

1. Introduction

The advancement in technological aspects has serious effects on human resource management (HRM) processes and practices, and is propelling to adopt new strategies in order to improve the development environment and workflow to reach the goals in a more effective manner. HRM is the management of an organizations workforce, or human resource; it is responsible for the attraction, selection, training, assessment, and rewarding of employees. HRM is the most important management function that focuses on the human element, which is the most precious resource and the most influential on productivity in the organization. The two important resources in organizations; people and information, can significantly affect the overall performance of a business and the business success naturally requires the management of both (Martinsons, 1994; Teo et al., 2007). Therefore, managers must combine these two resources by

adopting new systems which can drive the organization to great success. This stems the need for these systems due to the great development of technology that could be employed in all areas.

This study is based on three technology adoption models available in literature. More specifically, the first model is the Technology Acceptance Model (TAM) by Davis *et al.* (1989). This model presents a theory of the acceptance and attitude towards Information Technology (IT) systems in general. The second model is a Theory of Planned Behavior (TPB) which was developed to predict an individual's intention to engage in a behavior at a specific place and time, and it is based on the Theory of Reasoned Action in 1980. The third model is the Yale Model of Communication and Persuasion developed by Hovland and his colleagues and constitutes one of the most widely-cited models of communication.

This study aims to investigate factors affecting the adoption of e-HRM technology in the Palestinian service sector and to develop a model for adopting such an e-HRM technology. The development of the proposed model is based on the extension of many models available in the literature, namely, technology acceptance model (TAM) with theory of planned behavior (TPB), Yale model of communication and persuasion, perceived risk, social risk and organizations role. Within the Palestinian context, pertinent data from banking, governmental, health care, insurance, internet providing, logistics, telecommunication and academic (universities) organizations working in Palestine, was gathered via questionnaires and interviews. The analysis of collected data indicates that perceived ease of use, attitude, intention, and communication are the most significant factors influencing e-HRM technology adoption in Palestine. On the other hand, perceived risk, system security, organizations role, and availability of resources are influencing e-HRM technology adoption in less degree. Based on the findings, Palestinian organizations should work on formulating new strategies, developing their operational process, introducing services with high quality, and coordinating with other entities such as Information and Communication Technology (ICT) companies and government that would be helpful in achieving employees and managers trust in order to spread e-HRM technology usage among Palestinian organizations.

The rest of the paper is organized as follows. Section 2 presents the pertinent literature review; namely, a general background on e-HRM technology and its models are presented. Section 3 presents the hypotheses related to the factors affecting the adoption of e-HRM as well as the proposed model of that. Section 4 presents the methodology of conducting this study. Section 5 presents the hypotheses and proposed research model. Section 6 includes the main results and findings of this study. The last section presents the conclusions.

2. Literature Review

2.1 General Background

Given that various authors published articles related to e-HRM technology and information technology, it is visible that there are interchangeable terms used to refer to e-HRM technology. For instance Human Resource Information Systems (HRIS), HR intranet, web-based HR, computer-based human resource management systems, virtual HR, and HR portals. Several authors argued about internet or web-based channels as a venture of HRIS (Lengnick-Hall and Morritz, 2003). While some authors preferred to use the term e-HRM technology over HRIS, many authors agreed that a line cannot be drawn between

IT-based information system for HR and internet-based HR applications as these two are basically doing similar jobs (Ruel, Magalhaes, and Chiemek, 2011). Thus, Ruel *et al.*(2011) defined HRIS as “ *all IT-based information system and application either stand alone or networked, for the human resource management purpose, utilized for facilitating HR practices, policies or strategies*”. The core difference between HRIS and e-HRM technology is basically that HRIS are direct towards the HR department itself whereas with e-HRM technology, the target group is not only the HR staff but people outside this department are also included. Technically speaking, it can be said that e-HRM technology is the technical unlocking of HRIS for all employees of an organization.

Olivas-Lujan *et al.* (2007) mentioned that the term e-HR or e-HRM technology was first used in the late 1990s when “e-commerce” was sweeping the business world. In the literature, e-HR is used interchangeably with virtual HRM, HR intranet, web-based HR, computer-based human resource management systems (CHRIS), and HR portals (Ruel *et al.*, 2007). According to Voermans and Veldhoven (2007), e-HRM technology could be narrowly defined as the administrative support of the HR function in organizations by using Internet technology. Ruel *et al.* (2007, 2011) defined e-HRM technology as a way of implementing HR strategies, policies, and practices in organizations through a conscious and directed support and/or with the full use of web-technology-based channels.

The importance of e-HRM technology is derived from the importance of technology in different areas of work. Surveys of HR consultants suggest that both the number of organizations adopting e-HRM technology and the depth of applications within the organizations are continually increasing (Crestone, 2007). This increase in adopting new technologies in different companies is a great guide on the importance and multi-benefits of it. In addition, an escalating number of practitioner reports provides a strong evidence that e-HRM technology is becoming increasingly common and must lead to remarkable changes and support for competitive advantage. In addition, they are increasingly using these systems to determine employee needs, deliver training, manage employee performance, and administer compensation and benefit systems plus evaluation systems (Strohmeier, 2007).

To date, research has suggested that e-HR systems typically increase the efficiency of all HR processes and procedures, reduce administrative costs, and decrease transaction times (e.g., the time of recruitment, time to replace employees) (Gueutal and Stone, 2005). On the other hand, connecting e-HRM technology and strategic decision making improves organizational performance. Based on data of more than 19,000 organizations, Liu *et al.* (2007) showed that HRM has a significant added-value in terms of influencing an organizations performance. Also, it shows that the importance of strategic decision making and the added-value of HRM were strongest when HRM decisions were related to strategy.

In fact, the role of information technology (IT) systems in human resources (HR) function primarily seeks to provide support at an administrative level, while IT support for strategic purposes is lacking (Strohmeier, 2007). Although electronic applications (e-HRM technology) are being used in various disciplines of HRM such as recruitment (Stone *et al.*, 2003), selection (Chapman and Webster, 2003), performance management and payroll administration (Teo *et al.*, 2001), organizations do not yet realize

the importance of e-HRM technology systems in make better HR decisions (Stone and Lukaszewski, 2005). The main HR responsibility is to select and recruit the appropriate employees, this is reflected in e-HRM technology system through e-recruitment or e-selection tools. Electronic selection (e-selection) is being used increasingly by organizations. It typically refers to the use of various applications and forms of technology (e.g., web-based job applications, web based tests, videoconference interviews) to help organizations with such tasks as conducting job analyses, gathering applicant data, assessing individuals, and making selection decisions (Crestone, 2014). In addition, compensation and wages are critical issues related to employees and managers within organizations which can be controlled through payment systems or e-compensation systems through e-HRM technologies. According to Dulebohn and Marler (2005), the e-compensation systems are those software packages or programs which are bought or developed by companies and are accessible through the company system through specific application or the internet which all the employees would be able to reach and use. On the other hand, performance appraisal and measuring work achievement play an important role in achieving the organizational goals. E-performance appraisal utilizes intelligent software instead of traditional methods to capture, store, analyze, rate and report the personals activities inside organizations to let the HR managers be informed about employee performance levels (Farr *et al.*, 2013).

One of the critical functions of a HR department in the organizations is training and development of employees. Companies start to look for ways to make the most of their existing core training available online, and to manage and measure the utilization of the new employee capabilities.

2.2 Technology Acceptance Model (TAM)

TAM model was developed by Davis *et al.* (1986) to study the determination of IT usage. The key purpose of TAM is to provide a basis for discovering the impact of external variables on internal beliefs, attitudes, intentions, and usage (Davis, 1989). The reason why TAM is chosen in this research is because TAM has been tested empirically and supported through validations, replications, and applications (Venkatesh, 2000; Lee, 2010). TAM is one of the most powerful, strong and parsimonious model for predicting user acceptance especially in information system context (Bueno and Salmeron, 2008). According to Venkatesh (2000). Figure 1 depicts the TAM model.

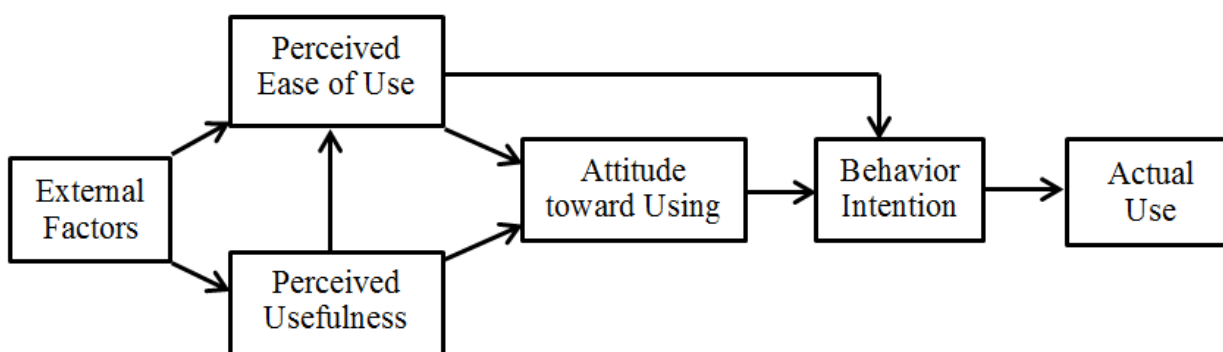


Figure 1: Technology Acceptance Model (TAM) (Davis *et al.* 1989).

2.3 Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) was developed to predict an individual's intention to engage in a behavior at a specific place and time, and it was based on the Theory of Reasoned Action in 1980. The theory was intended to explain all behaviors over which people have the ability to make self-control (Ajzen, 1988). According to Taylor and Todd (1995) the TPB has been used successfully to predict and explain a large group of health behaviors and intentions including smoking, and health services utilization. The TPB states that behavioral achievement depends on both motivation (intention) and ability (behavioral control). It distinguishes between three types of beliefs: behavioral, normative, and control. Figure 2 depicts the TPB model.

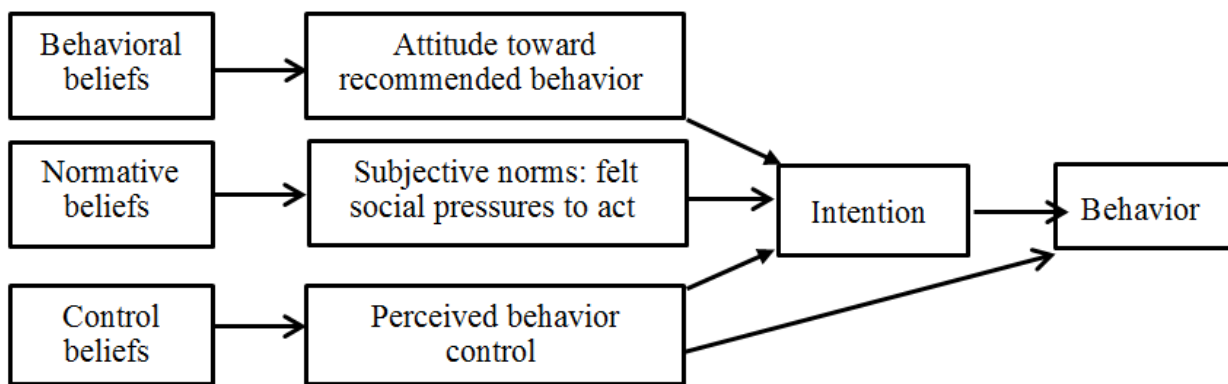


Figure 2: Planned Behavior Theory (Ajzen, 1988).

2.4 Yale Model of Communication and Persuasion

Yale Model of Communication and Persuasion was developed by Hovland and his colleagues. Yale constitutes one of the most widely cited models of communication. The model suggests that three factors influence the degree to which communication influences attitudes and behaviors: source factors, message factors, and audience characteristics. In addition, several message factors may influence the effectiveness of the communication process including the order of arguments, the explicitness of requests, and the use of emotional appeals (Hovland, 1957). This model has been selected in this study in order to investigate the impact of the use of e-HRM technology to communicate between individuals within the organization and how we can develop communication skills among employees and managers through the adoption of new technology in the management function. Figure 3 depicts the Yale model.

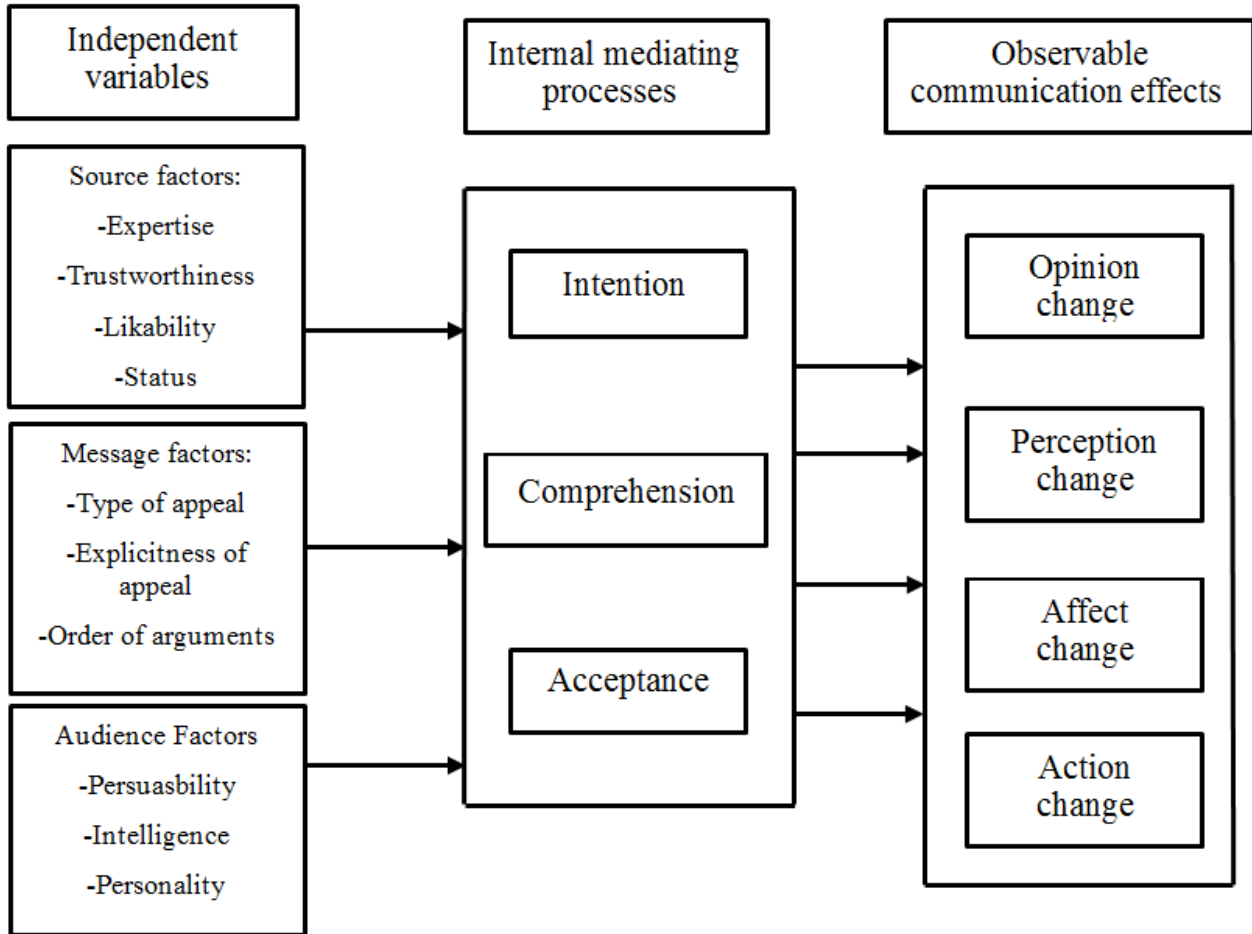


Figure 3: Yale model of Communication and Persuasion. (Janis and Hovland, 1959).

3. Hypotheses of e-HRM Technology Adoption

TAM and the other two models are used to develop the proposed model in this study. More specifically, we focused on the following factors: system security, performance time, employee training, and availability of IT resources social risk, and perceived risk, performance ease of use, performance usefulness, company roles, attitude, intention, and communication. To measure the effect of these factors on the adoption of e-HRM technology in the targeted Palestinian service organizations, at least one corresponding hypothesis is formulated to be later tested. The hypotheses are formulated in consistence with their pre assumed effect of their corresponding factors available in the previously-presented three models. Table 1 summarizes the hypotheses and the proposed relationship between the study factors affecting the adoption of the e-HRM technology in the targeted organizations.

Table (1): Hypotheses of e-HRM technology adoption.

Hypotheses	Statement
H1	System security (SS) has direct and positive effect on perceived usefulness (PU) of e-HRM technology.
H2	Performance time (TIME) has direct and positive effect on perceived usefulness (PU) of e-HRM technology.
H3	Performance time (TIME) has direct and positive effect on perceived ease of using (PEOU) e-HRM technology.
H4	System security (SS) has direct and negative effect on perceived risk (PR).
H5	IT experience (Employee training and Availability of IT resources) (AIT) has direct and negative effect on perceived risk (PR).
H6	Perceived usefulness (PU) has direct and positive effect on attitude (ATT) to using e-HRM technology.
H7	Perceived usefulness (PU) has direct and positive effect on behavioral intention (INT) to use e-HRM technology.
H8	Perceived ease of use (PEOU) has positive effect on perceived usefulness (PU) to use e-HRM technology.
H9	Perceived ease of use (PEOU) has positive effect on attitude (ATT) toward using e-HRM technology.
H10	Perceived Risk (PR) has negative effect on perceived ease of use (PEOU) e-HRM technology.
H11	Perceived Risk (PR) has negative effect on attitude (ATT) to use e-HRM technology
H12	Perceived Risk (PR) has negative effect on perceived usefulness (PU) to use e-HRM technology.
H13	Attitude (ATT) toward using e-HRM technology has direct and positive effect on behavioral intention (INT) to use e-HRM technology.
H14	Social risk (SR) has negative influence on intention (INT) to use e-HRM technology.
H15	Company role (CR) has positive influence on intention (INT) to use e-HRM technology.
H16	Company role (CR) has positive influence on perceived usefulness to use (PEOU) e-HRM technology.
H17	Social risk (SR) has positive influence on perceived risk (PR) to use e-HRM technology.
H18	Communication (COM) has direct and positive influence on employee intention (INT) to use e-HRM technology.

Hypotheses 1 to 13 are formulated based on TAM model, hypotheses 14 and 15 are formulated based on TPB model, hypotheses 16 and 17 are formulated based on the relationship between TAM and TPB, and the formulation of hypothesis 18 depends on Yale model. Based on the previous hypotheses and semi-structured interviews conducted with several IT specialists and specific HR managers in the targeted Palestinian organizations we designed the hypotheses relationship network (See Figure 4) for adopting e-HRM in those organizations.

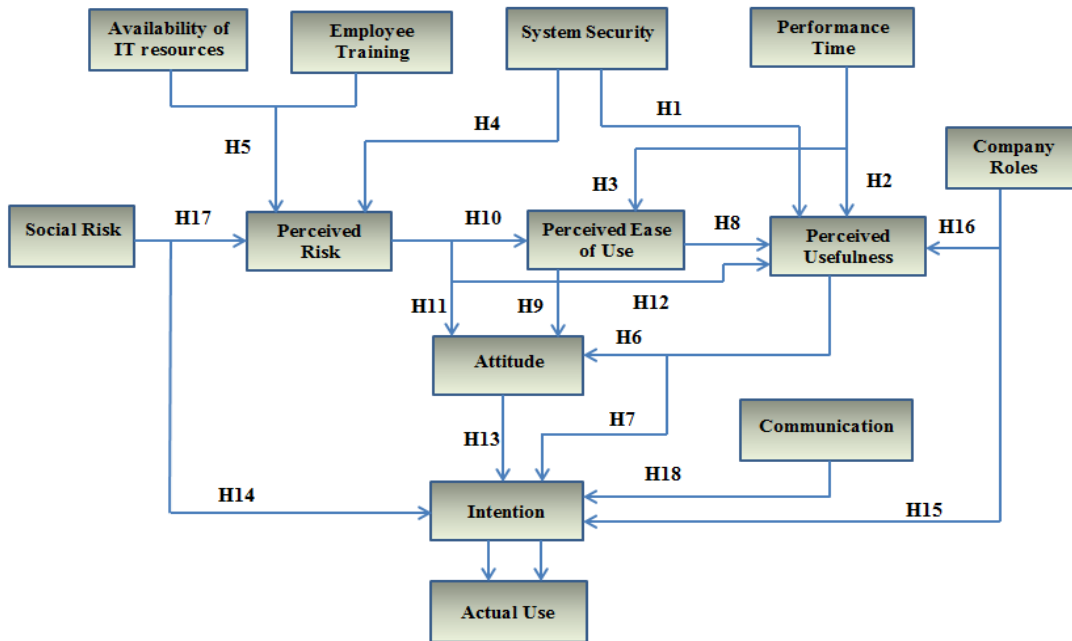


Figure 4: Hypothesis Relationship Network.

4. Methodology

4.1 Demographics of Participants

In the initial stage of this study, a series of semi-structured interviews with IT specialists and some of HR managers were conducted to explore the problems of e-HRM technology adoption, assess the usage of e-HRM technology in Palestine, and to highlight the factors that influence e-HRM technology adoption in Palestine. In the second stage, a quantitative survey was designed and conducted to further proceed with the study. A random sample of 600 participants was chosen depending on the population size which was 259740 employees in working in the targeted organizations in Palestine. As shown in Table (2), the sample was divided among the participants, chosen from eight service subsectors. The participants were asked to report their opinions on questions related to the 18 hypothesis as well as some demographic information in a peer-reviewed questionnaire. Participants were chosen from different job positions in the targeted organizations. Namely, HR managers, IT and technical support managers, top managers and employees were chosen to participate who collectively constitute the main stakeholders of using e-HRM

technologies. Table (3) summarizes the percentages of each job title among the responded participants of the sample.

Table (2): Distribution of questionnaires among the targeted organizations

Service Subsector	Distributed Surveys	Received Surveys	Valid Surveys	Response Rate (%)
Banks	110	89	83	75.4
Government	122	103	86	70.5
Health Care (Hospitals)	75	61	59	78.6
Insurance	37	37	36	97.3
Internet Providers	44	44	42	95.4
Logistics	30	29	29	96.6
Telecommunication	86	81	79	91.8
Academic (Universities)	96	79	76	79.1
Total	600	523	490	81.66%

Table (3): Distribution of questionnaires among different job titles.

Job Title	Count	Percentage (%)
Employee	307	62.7
HR Manager	19	3.9
Top Manager	27	5.5
IT and a Technical Manager	14	2.9
Department Manager	123	25.1
Total	490	100%

Data were collected from twenty one firms from different geographical areas in Palestine, three organizations were selected from each service subsector through web search and interviews in order to ensure that the selected organizations have available web sites and electronic database of their human resources. Due to the limited number of firms, the study focused on large and medium-sized organizations because these organizations have been employing e-HRM technologies and thus the assessment of HRM technologies in such organizations would be possible. More specifically, when the number of employees increases in an organization, the motivation factors to adopt new electronic HRM technologies becomes more dominant. In addition, the cost of employing these technologies constitutes a burden on small organizations, but medium and large organizations have the ability to build utilize such electronic technologies because the increase in the employee number increases the complexity and difficulty of work and hence creates a need for a flexible system to manage the human resources efficiently.

The sample included 332 male or 67.8% of the participants and 158 female or 32.2% of the participants. In addition, the participants were from different ages and different educational levels, as shown in Table (4) and Table (5), respectively.

Table (4): Distribution of questionnaires among different age levels.

Age	Count	Percentage (%)
Less than 25 years	63	12.9
25 – 35 years	224	45.7
35 – 45 years	118	24.1
45 – 55 years	75	15.3
55 – 65 years	10	2.0
Total	490	100%

Table (5): Distribution of questionnaires among different educational levels.

Educational Level	Count	Percentage (%)
High School or Less	6	1.2
Diploma	54	11.0
Bachelor	339	69.4
Master	75	15.3
PhD	15	3.1
Total	490	100%

4.2 Measurement

The questionnaires comprised close-ended questions using the Likert scale. This method of preference indication was deemed the most preferable and the most common as compared to other method of scales. The Likert scale was easy to construct and could be easily understood by the participants. It allowed the participants a sufficient range (five options) of choices when answering the survey questions, thus enabling the collection more accurate information from the participants. For the purpose of statistical analysis, numbers were assigned to each option. The options used are: Strongly Disagree (=1); Disagree (=2); Neutral (=3); Agree (=4); Strongly Agree (=5). For each factor of adopting e-HRM, the Cronbach’s alpha coefficient was calculated to measure the reliability and internal consistency of collected data using equation (1).

$$\alpha = \left[\frac{K}{K-1} \right] \left[1 - \frac{\sum_{i=1}^K \sigma_{Y_i}^2}{\sigma_X^2} \right] \dots\dots\dots(1)$$

Where α is the Cronbach’s alpha, K is the number of statements in the questionnaire, σ_X^2 is the

variance of the observed total questionnaire scores, $\sigma_{Y_i}^2$ is the variance of statement (question) i in the

questionnaire and $X = \sum_{i=1}^K Y_i$.

Table 6 shows Cronbach's Alpha for each questionnaire' paragraphs, all coefficients were above 0.7 which insure the internal consistency among questionnaires constructs.

Table (6): Cronbach's alpha for questionnaires' paragraphs

Factor affecting e-HRM adoption	Number of Items	Cronbach's Alpha (α)
Perceived Usefulness (PU)	5	0.749
Perceived Ease of Use (PEOU)	3	0.873
Attitude (ATT)	4	0.877
Availability of IT Resources (AIT)	4	0.756
Intention (INT)	3	0.861
System Security (SS)	4	0.789
Performance Time (TIME)	4	0.769
Perceived Risk (PR)	4	0.714
Organization Roles (OR)	4	0.879
Social Risk (SR)	3	0.808
Communication (COM)	2	0.862
Total	40	0.840

5. Results and Discussion

Research results show the statistical differences between participants in the research according to received questionnaires. Independent Samples Test (t-test for Equality of Means) and one-way ANOVA Test are used to explain these differences.

5.1 Statistical Differences According to Demographic Variables

Differences According to Gender

The T-test is used to test (at 5% significance level) if there any statistical significant differences between male and female participants of their mean reporting on each of the e-HRM adoption influencing factors shown in Table (6) above. Table (7) summarizes the results of the differences where statistical differences between male and female participants appeared in perceived usefulness, system security, and perceived risk factors.

Differences According to Age

One-way ANOVA test (at 5% significance level) revealed statistical differences between age categories of participants in perceived usefulness, intention, and system security.

Table (7): Independent samples test for gender differences among participants

Factors	t-test for Equality of Means	
	t	p-value*
Perceived Usefulness (PU)	2.351	0.019*
Perceived Ease of Use (PEOU)	1.936	0.053
Attitude (ATT)	1.660	0.097
Availability of IT Resources (AIT)	.479	0.632
Intention (INT)	1.768	0.078
System Security (SS)	3.321	0.001*
Performance Time (TIME)	-1.712-	0.088
Perceived Risk (PR)	2.433	0.015*
Organization Roles (OR)	-1.474-	0.141
Social Risk (SR)	-.510-	0.610
Communication (COM)	.259	0.796

*: difference is significant if the p-value is less than significance level (5%).

Differences According to Job Title

One-way ANOVA test (at 5% significance level) showed that there are statistical differences among participants job titles as appeared in perceived usefulness, perceived ease of use, attitude, intention, system security, organization roles, and social risk.

Differences According to Educational Levels

The one-way ANOVA test (at 5% significance level) results revealed statistical differences between participants according to their educational levels. These statistical differences are found to be toward perceived usefulness, perceived ease of use, attitude, intention, and system security.

5.2 Hypotheses Testing Results

To test the research hypotheses Pearson Correlation was used. Tables (8) shows the significant values between all factors affecting the adoption of e-HRM. Based on Pearson Correlation statistical analysis shown in Table (8), the results of hypotheses show that all hypotheses have been accepted except H5. Depending on the statistical analysis between the relationship of the factors the, results show that statistical differences are found ($P < 0.05$) for all hypotheses accepted for H5 ($P > 0.05$).

Table (8): Pearson Correlations between all factors.

		PU	PEOU	ATT	AIT	INT	SS	TIME	PR	OR	SR	COM
PU	Pearson Correlation	1	.406**	.413**	.390**	.353**	.298**	.155	.166**	.352**	.223**	.378**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.001	.000	.000	.000	.000
PEOU	Pearson Correlation	.406**	1	.453**	.303**	.452**	.396**	.199**	.196	.292**	.224**	.334**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
ATT	Pearson Correlation	.413**	.453**	1	.287**	.413**	.337**	.241**	.248**	.163	.216**	.332**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
AIT	Pearson Correlation	.390**	.303**	.287**	1	.267**	.235**	.166**	.057	.477**	.093**	.235**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.205	.000	.041	.000
INT	Pearson Correlation	.353**	.452**	.413**	.267**	1	.436**	.253**	.255**	.303**	.311**	.328
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
SS	Pearson Correlation	.298**	.396**	.337**	.235**	.436**	1	.194**	.336**	.191**	.278**	.356**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
TIME	Pearson Correlation	.155	.199**	.241**	.166**	.253**	.194**	1	.166**	.085	.165**	.205**
	Sig. (2-tailed)	.001	.000	.000	.000	.000	.000		.000	.059	.000	.000
PR	Pearson Correlation	.166**	.196**	.248**	.057	.255**	.336**	.166**	1	.056	.174	.137**
	Sig. (2-tailed)	.000	.000	.000	.205	.000	.000	.000		.213	.000	.002
OR	Pearson Correlation	.352**	.292**	.163**	.477**	.303**	.191**	.085	.056	1	.176**	.283**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.059	.213		.000	.000
SR	Pearson Correlation	.223**	.224**	.216**	.093**	.311**	.278**	.165**	.174**	.176**	1	.342**
	Sig. (2-tailed)	.000	.000	.000	.041	.000	.000	.000	.000	.000		.000
COM	Pearson Correlation	.378**	.334**	.332**	.235**	.328**	.356**	.205**	.137**	.283**	.342**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	

**. Correlation is significant at the 0.05 level (2-tailed).

5.3 The Suggested e-HRM Adoption Model

Next, we build the e-HRM technology adoption model depending on hypotheses results. Table (9) shows the supported hypotheses that have been accepted and being adopted by the research model. In addition, a new relationship appeared between the intention to use e-HRM technology and the level of system security. This new relationship illustrates the importance of the existence of a link between the intention of employees to use e-HRM technology and the level of the system security. More specifically, when the level of system security increases, employees will be more motivated to adopt the e-HRM system and use it. This relationship has not been noted in the previous studies in literature but the statistical differences in our study proved the existence of this relationship because ($P < 0.05$) between this two factor. Therefore, our research model includes this new relationship in addition to the previous relations which are proven through hypotheses as well as in previous studies in literature.

Table (9): Correlations between factors affecting e-HRM system

	Perceived Usefulness (PU)	Perceived Ease of Use (PEOU)	Attitude (ATT)	Intention (INT)	Perceived Risk (PR)	Organization Roles (OR)
Perceived Usefulness (PU)			H6 *	H7 *		
Perceived Ease of Use (PEOU)	H8 *		H9 *	H--		
Attitude (ATT)				H13 *		
Availability of IT resources (AIT)					H5	H--
System security (SS)	H1 *			H--	H4 *	
Time (TIME)	H2 *	H3 *				
Perceived risk (PR)	H12 *	H10 *	H11 *			
Company roles (CR)	H16 *			H15 *		
Social risk (SR)				H14 *	H17 *	
Communication (COM)				H18 *		

*: Supported hypothesis. H--: Strong relationship.

Collectively, depending on the result of the statistical analysis which shows the relationships between the proposed factors in the hypotheses relationship network, we suggest the model, shown in Figure 5, for adopting e-HRM technology in the Palestine in general and in the Palestinian service sectors in particular.

6. Conclusions

This research aims to investigate factors affecting e-HRM technology adoption in Palestinian service sector, and to introduce an e-HRM technology adoption model which can assess the service sector to spread this developed technology among Palestinian organizations. A research model was conceptualized via reviewing related literature and experts opinions in the design process. The research framework depends on Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Yale model of Communication and Persuasion.

Results indicate that perceived ease of use, attitude, intention, and communication are the most significant factors influencing e-HRM technology adoption in Palestine. Whereas perceived risk, system security, organizations role, and availability of resources are influencing e-HRM technology adoption in less degree. Based on the research findings, the organizations should work on formulating new strategies, developing their operational process, introducing services with high quality, and coordinating with other entities such as ICT companies and government that would be helpful in achieving employees and managers trust in order to spreading e-HRM technology.

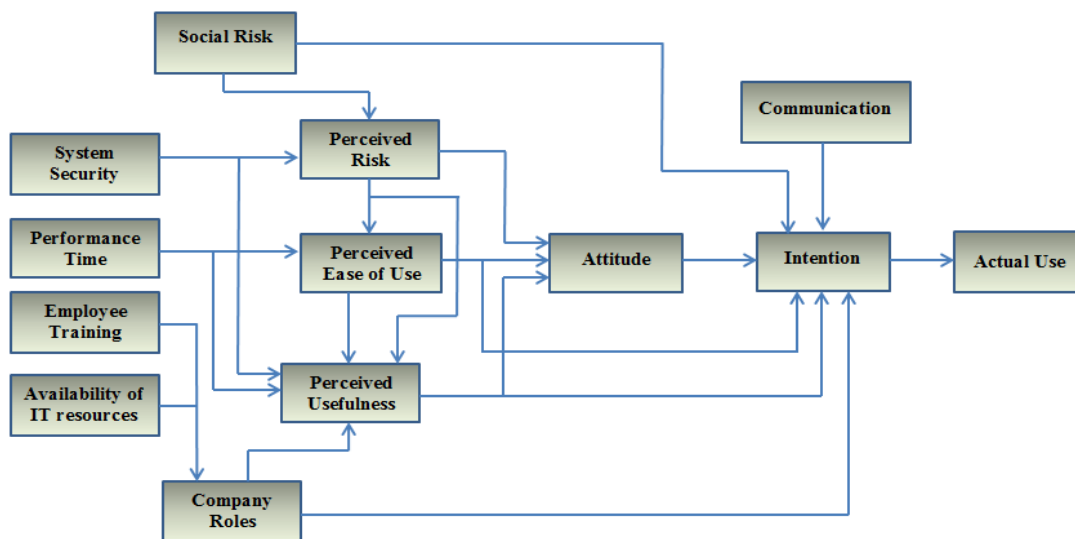


Figure 5: e-HRM Technology Adoption Model.

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INVESTIGATING THE EFFECT OF INTERNET MARKETING ON CUSTOMERS' DECISION TO PURCHASE (CASE STUDY: AMICO INDUSTRIAL GROUP)

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Abstract

The objective of the present study is to investigate the effect of internet marketing on the decision of customers of Amico Industrial Group. The present study is an applied one in terms of objective and a descriptive-survey study in terms of method and data collection method (field study). For this research, 3 secondary hypotheses and a main hypothesis were developed. The population of the research are those customers who referred to the agencies of Amico Industrial Group in the City of Tabriz during one month for purchase and after sales services of business machines and motorcycles. They were estimated as 88 individuals. To collect data, a questionnaire was used and to analyze data, Pearson correlation coefficient and regression tests as well as the SPSS software were used. The results indicate that internet marketing techniques (websites, Banner ads, and social networks) have positive effects on the customers' purchase from Amico. The findings also indicate that Amico Industrial Group can influence positively on its customers using internet marketing and results in increasing the purchase of products and customers' satisfaction.

Key words: internet marketing and purchase decision, customers, Amico.

Introduction

Internet has been considered as the biggest center for online sales of a lot of industries and businesses all over the world. It is predicted that in Canada, in 5 to 8 next years, individuals do their tasks outside the home online. In addition, now in Canada and Toronto, only 3% of newspapers are printed in paper and traditionally for printing, distributing and doing all affairs (Barnes, 2010). In recent years, in Iran the number of internet users is significantly increasing. Iran is advancing in terms of digital marketing. If managers do not use these chances appropriately, they lose a lot of opportunities and therefore, will be defeated by their competitors (Eftekhar Manavi et al. 2013). Kotler and Armstrong state that designing and implementing strategies of internet marketing is very important. Managers and experts should be familiar with marketing issues and know how customers' behaviors change (Kotler and Armstrong, 2013). On the other hand, attaining customers' satisfaction is the main factor of attaining competitive advantage of organizations. The necessity of attracting customers' satisfaction is to realize their needs fully and to

identify their wants, expectations, desires, abilities, and limitations attentively in purchasing products. By access to such information, factors affecting customers' behaviors can be appropriately identified and they can be used in adopting marketing decision making in companies. Therefore, companies' products should be compatible with customers' expectations. In this line, identifying different dimension of purchaser's decisions and determining the relationship of elements intertwined with marketing are necessary (Sharj Sharifi, Cherakh, 2013). In addition, industrial companies, in the past, emphasized more on traditional marketing. Increasing industrial companies and the existence of competitive market and using marketing techniques and internet marketing for industrial companies such as service organization seem necessary. Amico Industrial Group includes a set of industrial companies which can use internet marketing for attracting their specific customers. The use of internet capabilities particularly the characteristics of designing products and communicative interactions of appropriate competitive instruments for motivating potential customers to purchase products and surviving and developing in the industry of business machines, motorcycles and parts manufacturing of Iran Electronics Industries of the market. Therefore, designing is the internet marketing mix design for enhancing current condition seems necessary.

Statement of the problem

The present age has been along with characteristics such as frequency of supply, competition development, technological upheavals and globalization, which has resulted in a lot of benefits for customers such as choice, increase in bargaining power and achievement of greater values for customers and more reasons for customers to purchase them and create long-term relationship with companies. Nowadays, customers want products with higher quality, more services, quicker supply, and with more appropriate prices appropriate with their own needs. Companies which have accepted the marketing philosophy, i.e. they have emphasized customers and the society as the axes of their operations, are consistently exert their efforts for creating and increasing value for their customers (Kotler and Armstrong, 2011).

Nowadays, the success of companies and institutions depends on the identification of customers, competitors, and other factors affecting the market. Regarding the fact that needs and demands of customers have always been changing, only it is in case of identifying these changes that a company can be successful. On the one hand, to attract customers, they do their best and on the other hand, the changes in market's conditions and rules governing it such as changes in technology and rules and regulations can influence the success of institutions in a market (Rusta et al. 2004).

Identifying different dimensions of marketing management in industries among which the competition is very severe and customers have different needs and wants, is very important (Wang and Kototorakes, 2011) because in competitive industries, due to increase in the number of competitors which reduces the volume of purchase and the technological differences are gradually removed among commercial names, companies either should be in search of parts of new markets or take the share of competitors' market via reducing prices of their product, provide better services or intangible benefits whose their competitors are not able to provide them. By technological advancement in machine-manufacturing industries and the emergent of economic crises, the increase in the purchase and stability of a competitive market and the

penetration into new markets have make the need to use modern marketing techniques such as internet marketing inevitable. In the present study, the researcher is to answer this question whether in the industry of manufacturing diesel cars and motorcycles, internet marketing techniques based on marketing principles are effective on the degree of decisions to purchase because the development of market share and increase in productivity of companies depend attracting customers and increasing the purchase of companies' products.

Theoretical framework

Internet marketing

Kotler and Armstrong (2013) states that internet marketing is the process of constructing and keeping relations with customers in online activities. This process includes seven stages:

1. developing a company's macro strategies
2. identifying market opportunities
3. formulizing marketing strategies
4. designing customers' experiences
5. designing marketing planning
6. creating customers' skills
7. evaluating the results of marketing programs

(Kotler and Armstrong, 2013)

Sum Siu (2002) states that in internet markets, customers are equal and a real customers equal to a virtual one, and internet marketing is founded on this principle (Sum Siu, 2002).

Internet marketing techniques

Internet marketing techniques and methods are diverse. As follows, the most important methods are briefly discussed.

Advertising banners

In this method, banners with other sites are exchanged and relationships, attract a lot of customers and visitors to the website of a company. Banner advertisement are rectangular advertisements which usually are observed at the top part of websites. It should be noticed that if banner advertisements are not attractive enough, they cannot guide and attract customers to websites (Mirzaei and Mohebbi, 2014: 36).

Websites

Basically websites are powerful instruments which the communication path between business of companies and customers are transformed via unbound suggestions. Nowadays, companies, due to competition in the global world, increasingly develop their own activities in line with this communication channel. The direct result of e-commerce is appearance of a new type of customers called electronic customers, those who use the Internet for purchasing products and services (Mark, 2011: 12). Summarily,

the characteristics of websites can be presented as follows:

1. attractive and beautiful design appropriate to customers' taste in each website
2. easy access to available information in websites
3. attentive classification with scientific method of information
4. low volume of graphic programming increasing load speed
5. avoiding any repeated and extra information
6. the possibility of searching in websites
7. important engine search should be introduced
8. the possibility of updating information should be feasible
9. the security of information should be guaranteed
10. the view of builders and owners of websites should be functionalist

(Hooper, 2013).

Social networks

An internet social network is a website or a set of websites which allows its own users to share their interests, thoughts, and activities with each other. A social network also can be used for identifying geographical positions of each individual. Social networks, in spite of being virtual in order for individuals to find new friends or make their old friends aware of the trend of changes, are places for exchanging information and ideas particularly for the youth and sharing ideas and beliefs (Khatami, 2010). Accordingly, Twitter, Facebook, Stumble Upon, Digg, +Google, Reddit, LinkedIn, DZone, are among the most famous social network which can be considered as instruments for sending information in social networks and attract frequent traffics and visitors towards companies' websites (Saman, 2013).

Advantages of marketing with social networks can be summarized as follows

1. Approximately all layers of the society can be found in these networks;
2. The popularity of companies can respond users' question and make close relationship with them
3. Activity in social networks causes that a lot of individuals can see the link of companies' products in their own profiles;
4. Marketers can attract thousands of fans to companies by releasing images, videos, or interesting texts.

(Alipour Marzangu and Ghorbani, 2013).

Customers' decision making

Wang et al. and also Wilson et al. define decision making as a process in which the superior alternatives or the better executive paths, by considering criteria and specific strategies are selected from among a set of alternatives (Hosseini and Talaei, 2011).

Scholars believe that customers use the problem-solving process for selecting products and services. They believe that the process of purchasing starts with identifying needs. After identifying a need, searching for information about products and services which may realize needs is to be conducted. After collecting information, evaluating alternatives and purchase decision are to be conducted. Figure 1-2 indicate the

decision making process towards purchases.

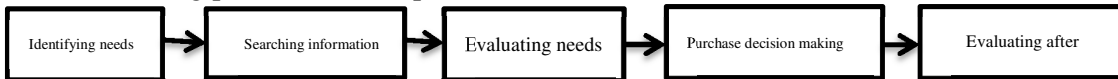


Figure 1. The purchase process of a customer (Perkash, 2002)

Research hypotheses

Main hypotheses

Internet marketing dimensions are positively effective on the purchase decision making of customers of Amico Industrial Group.

Secondary hypotheses

Marketing via internet advertising banners is positively effective on the purchase decision making of customers of Amico Industrial Group.

Marketing via websites is positively effective on the purchase decision making of customers of Amico Industrial Group.

Marketing via social networks banners is positively effective on the purchase decision making of customers of Amico Industrial Group.

Research method

The present study is an applied research in terms of objective and in terms of method, on the one hand, in terms of statement of the current status of research variables, it is a descriptive-survey research and on the other hand, in terms of the researcher's intention to investigate and illustrate the cause-effect relationship in his research, it is considered as a causal research.

The population of the research includes all customers who referred to the agencies of Amico Industrial Group for purchasing or using after sales services of business machines and motorcycles during one months. They were 88 individuals. The data were collected via a researcher made questionnaire designed for internet marketing dimensions (including 15 questions) and for purchase decision making (10 questions) in a five point Liker scale. The reliability was obtained as 0.823 using the Chronbach's alpha coefficient for the internet marking questionnaire. In addition, the reliability of the purchase decision making questionnaire was obtained as 0.792. These values indicate that firstly, the questions of the questionnaire enjoy high correlation with each other and secondly, the questionnaire enjoys high reliability. To determine the validity of the research instrument, form validity was used. Accordingly, the initial questionnaire was designed and were submitted to two professors and experts of marketing in order to comment about the issue whether these questions measure what is to measure or not? Then, the ideas of professors and experts about the questionnaire were considered and necessary amendments were adopted. The research data were analyzed at two descriptive and analytical levels. At the descriptive statistical level, the table of frequency and mean scores were used; but at the inferential level, Pearson correlation and regression were employed.

Testing hypothesis

Testing secondary hypothesis

- Marketing via internet advertising banners is positively effective on the purchase decision making of customers of Amico Industrial Group.

Table 1: the results of ANOVA of hypothesis 1 related to the regression of the effect of internet advertising banners on customers' purchase decision making

R^2	R	P-Value	F-value	Total regression model
Adj R^2				
$R^2=0.395$	0.629	0.000	122.97	
0.392= Adj R^2				
P-Value	t-value	Beta coefficient	Symbol	Variable name
0.000	26.559		α	Fixed value
0.000	11.089	0.629	β_1	Advertising banners

Regarding the results of hypothesis 1 indicated in table 1, the coefficient of determination is 0.395, i.e. 39.5% of observed dispersion in the dependent variable cannot be justified by the independent variable. In addition, the significance level of the f-value (0.000) is less than the acceptable error value (5%) and the total regression model is significant and indicates the goodness of fit of the model. Regarding the lower the probability level (p-value) of the t-value than the acceptable error value for β_1 coefficient, the results of the test indicated that marketing via internet advertising banners is positively effective on the purchase decision making of customers of Amico Industrial Group. Therefore, hypothesis 1 can be confirmed at the significance level 95%.

- Marketing via websites is positively effective on the purchase decision making of customers of Amico Industrial Group.

Table 2: the results of ANOVA of hypothesis 2 related to the regression of the effect of website on customers' purchase decision making

R^2	R	P-Value	F-value	Total regression model
Adj R^2				
$R^2=0.378$	0.378	0.000	31.392	

0.143= AdjR ²				
P-Value	t-value	Beta coefficient	Symbol	Variable name
0.000	33.765		α	Fixed value
0.000	5.603	0.378	β_1	Advertising banners

Regarding the results of hypothesis 2 indicated in table 2, the coefficient of determination is 0.378, i.e. 38.8% of observed dispersion in the dependent variable cannot be justified by the independent variable. In addition, the significance level of the f-value (0.000) is less than the acceptable error value (5%) and the total regression model is significant and indicates the goodness of fit of the model. Regarding the lower the probability level (p-value) of the t-value than the acceptable error value for β_1 coefficient, the results of the test indicated that marketing via website is positively effective on the purchase decision making of customers of Amico Industrial Group. Therefore, hypothesis 2 can be confirmed at the significance level 95%.

- Marketing via social networks banners is positively effective on the purchase decision making of customers of Amico Industrial Group.

Table 3: the results of ANOVA of hypothesis 3 related to the regression of the effect of social networks on customers' purchase decision making

R² AdjR²	R	P-Value	F-value	Total regression model
R ² =0.314 0.311= AdjR ²	0.561	0.000	86.223	
P-Value	t-value	Beta coefficient	Symbol	Variable name
0.000	14.000		α	Fixed value
0.000	9.289	0.561	β_1	Advertising

				banners
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Regarding the results of hypothesis 3 indicated in table 3, the coefficient of determination is 0.314, i.e. 31.4% of observed dispersion in the dependent variable cannot be justified by the independent variable. In addition, the significance level of the f-value (0.000) is less than the acceptable error value (5%) and the total regression model is significant and indicates the goodness of fit of the model. Regarding the lower the probability level (p-value) of the t-value than the acceptable error value for β_1 coefficient, the results of the test indicated that marketing via social networks is positively effective on the purchase decision making of customers of Amico Industrial Group. Therefore, hypothesis 3 can be confirmed at the significance level 95%.

Main hypothesis

Internet marketing dimensions are positively effective on the purchase decision making of customers of Amico Industrial Group.

Table 4: the results of ANOVA of the main hypothesis related to the regression of the effect of internet marketing dimensions on customers' purchase decision making

R^2	R	P-Value	F-value	Total regression model
0.615 $R^2 =$ 0.613 $AdjR^2$	0.784	0.000	300.418	Total regression model
P-Value	t-value	Beta coefficient	Symbol	Variable name
0.000	11.947		α	Fixed value
0.000	17.333	0.034	β_1	Advertising banners

Regarding the results of hypothesis 3 indicated in table 3, the coefficient of determination is 0.615, i.e. 61.5% of observed dispersion in the dependent variable cannot be justified by the independent variable. In addition, the significance level of the f-value (0.000) is less than the acceptable error value (5%) and the total regression model is significant and indicates the goodness of fit of the model. Regarding the lower the probability level (p-value) of the t-value than the acceptable error value for β_1 coefficient, the results of the test indicated that marketing via internet marketing dimensions is positively effective on the purchase decision making of customers of Amico Industrial Group. Therefore, hypothesis 3 can be confirmed at the significance level 95%.

Conclusion and suggestions

With the advent of modern marketing methods about 79 years ago, experts of this profession were noticed of its direct effects on the society; effects which images on newspapers all the time create in people's minds. Nowadays, these images can appear on the screen of a computer and even lively and dynamically can be illustrated with voice. The Internet as the biggest world network was created according to the tradition of free access to information, but rapidly it changed from a research instrument into one of the most expansive trade facilities in the world which requires its own particular marketing and advertising methods. As in the previous studies investigated, the results of the present study is consistent with the previous studies in different industries confirming the positive effect of internet marketing on customers' behavior and decision making.

In these studies, regarding the existence of different techniques on the positive effects of internet marketing on purchase decision making of customers of business machines and motorcycles of Amico Industrial Group, the following results are presented for managers of organization and marketers:

- Supporting agencies, motivating and encouraging them in attracting and training marketers, expanding the purchase network, agencies and creating branches in all regions of Iran for servicing and introducing companies to individuals in the society for creating and keeping relationship with customers are important factors.
- Enhancing the beauty of webpages related to companies: by managing webpages, a lot of values can be added to webpages.
- Posting regularly: providing updated information on the services provided by the company
- Creating posts with pictures and videos: image posts of companies' services, interviews of authorities and social activities of companies.
- Creating the grounds for free conversation and sharing users' ideas about services and products of companies.
- Designers of websites should instead of concentrations on the visual profile of websites, concentrate on the use of feasibility of purchase.
- Before purchasing goods or services of the process of ordering, purchasing goods in the image from and stage by stage, they will be illustrated for customers in order that they can purchase goods as easily as possible.
- It should be noted that current questions which customers' regularly ask, are prepared and are put in websites with answers.
- Beautifully designed and appropriate advertising banners store
- Using multi-dimensional moving images and advertising banners

Research limitations

- There are a lot of internet marketing techniques which in the present study regarding the population, internet marketing methods are limited to websites techniques, advertising banners, and social networks.
- The population of the case study includes those customers who referred to agencies of Amico in the City of Tabriz for purchasing or receiving business machines and motorcycles.
- Data collection instrument are limited to a questionnaire.

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VARIABLE COSTING AND ITS APPLICATIONS IN MANUFACTURING COMPANY

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Abstract:

Variable Costing has now arrived of a period and is providing to be an exceptionally important tool in planning and controlling operations in many large industrial companies. However still not as broadly working as absorption costing, it is progressively gaining popularity in use. In Variable Costing, product costs contain only those manufacturing costs which are directly related to the product and vary with production volume. Under absorption costing all manufacturing costs, direct and indirect, are included as cost of manufactured goods. This article discusses variable costing that is used only for internal reporting and analysis and its applicability in the manufacturing situation. Variable and absorption costing are not commonly exclusive. Accountants find that variable costing more effectively meets internal requirements because it provides better insight into cost relationship while the absorption costing method meets external reporting requirements.

Keywords: Absorption costing, Contribution margin, Variable Costing, Fixed factory overhead, Variable factory overhead.

1. Introduction

Cost accounting supplies management with the necessary information for decision making. Accounting information enables a manager to take the right decision instead of his relying upon intuition and hunch. Accounting information concerning expected future costs and revenues, and an analysis of the same, will assist management in making right decision. Product costing is one of the objects of cost accounting. Appropriate costing of a product is essential for taking appropriate managerial decisions. Costing is,

according to the definition of the Chartered Institute of Management Accountants (CIMA) Terminology (p.10), “the process of determining the costs of products, services and activities”. Accordingly, the cost of manufactured products is generally based on either Absorption Costing (the full costing concept) or Variable Costing (the variable costing concept). As all of us are familiar with the methodologies and accounting treatment of absorption costing, this paper has attempted to give a detailed aspect of variable costing. The purpose of this paper is to review literature on variable costing in our manufacturing environment. The paper will be useful to researchers, cost accountants and others concerned with product costing to understand the official importance of variable costing. The main limitation is that this is not an empirical investigation of variable costing in our manufacturing firms.

2. Meaning of Direct or Variable Costing

Under absorption costing, all factory overhead costs, both variable and fixed, are treated as product costs. Under Variable Costing, only factory overhead costs that vary with volume are charged to products. That is only the costs of direct materials, direct labor, and variable factory overhead are included in inventory. The concept of Variable Costing considers only the costs of direct materials, direct labor and variable factory overhead to be product costs. Fixed factory overhead under Variable Costing is not included in inventory. The concept of Variable Costing considers fixed factory overhead to be a period cost. In Variable Costing, fixed costs are differentiated from variable costs not only in internal reports but in the various cost accounts as well.

3. Impact of Automated Manufacturing Environment

Variable costing was appropriate when variable costs were a high proportion of total production costs. Also, variable costing was appropriate when product diversity was small and there was not a wide variation of product demands made on the firm’s production and marketing resources. Changes in the factory environment have decreased the percentage of variable costs in total manufacturing cost. With automation on the increase in industry, fixed costs become an ever larger element. Depreciation and related costs of automated equipment cause a large portion of overhead to be fixed, not variable. The spread of guaranteed annual wage contracts also causes more of the labor costs to be fixed. Thus, fixed costs are becoming a larger share of total manufacturing costs. The competitive environment is forcing companies to produce an increasing variety of products that make different demands on equipment and support departments. Some accountants argue that in this cost accounting environment, absorption costing becomes the only meaningful costing method. Other accountants believe that as automation

increases, costing is dysfunctional for management accounting decisions. Their view is rooted in the idea that all product costs are based on assumptions, estimates, allocations, and averages. This is especially prevalent for assigning factory overhead cost and other indirect product costs. Variable costing overcomes the limitation of absorption costing, but it excludes fixed cost elements that many accountants believe they should assign to products. Such shifts in the cost characteristics of a company emphasize the importance of management understanding the impact of fixed cost. The company has less flexibility in altering decisions, because it has invested more dollars in machinery and plant. However, merely grouping fixed overhead items together to charge to the period under variable costing may be insufficient to control a company's raising fixed overhead costs. On the other hand, differentiating between fixed and variable costs as plants become more automated can be a first step in controlling costs. Managers need better information because they have to deliberate more carefully over the expansion of labor force and production facilities. Admittedly, with increased fixed costs experienced in automated manufacturing, omitting fixed costs from products may have less merit.

4. Variable Costing versus Absorption Costing

In addition to long-range statements to evaluate factors affecting income, companies need short-period income statements that do not consider the entire production and sales cycle. Variable costing meets this need even in small business with limited cost accounting systems. Variable costing is an overhead costing approach that consolidates the desirable features of breakeven analysis and profit planning involving both generally accepted accounting principles and tax regulations require manufacturing companies to use an absorption costing system. This does not mean that it must be used for managerial purposes. However for internal reporting and control purposes, management can use any kind of information it wishes. There is only one criterion: the information must be useful. Because of the complexities associated with absorption costing, many companies have chosen to use something somewhat more intuitive, and therefore useful, for internal purposes: variable costing. The major differences between Variable Costing and absorption costing are briefly discussed as follows:

1. Absorption costing income statement presented in the traditional or functional format makes no distinction between fixed and variable costs. As a result, absorption costing income statements do not show cost-volume-profit relationships as clearly as variable costing income statements.
2. Inventory values are smaller with variable costing because it capitalizes only variable costs as asset. Inventory values using absorption costing have an additional amount for fixed factory overhead.

3. Variable costing income is lower than that for absorption costing when production exceeds sales. Variable costing charges total fixed cost incurred against sales revenue, while absorption costing applies part of it to inventory and defer the cost until sale of the product. If there is an increase in inventories, variable costing income will be less than absorption costing income will be less than absorption costing income.
4. Variable costing income is higher than absorption costing income when units are sold exceeds units produced. Variable costing income always moves in the same direction as sales volume.
5. Conventional absorption costing determines an intermediate income figure called gross margin that reflects the difference between sales and the fixed and variable costs of sales. This figure normally varies significantly from the manufacturing contribution margin determined with variable costing, because we subtract only the variable expenses of the goods sold from sales revenue.
6. The difference between the operating incomes under the absorption Variable Costing is due to the amount of fixed factory overhead in the work-in-process and finished goods inventories.

5. Uses of variable costing in a manufacturing concern

Variable Costing focuses attention on the product and its costs. This interest moves in two directions:

- A. To internal uses of the fixed-variable cost relationship and the contribution margin concept, and
- B. To external uses involving the costing of inventories, income determination, and financial reporting.

5.1 internal uses of variable costing

Executive Management, including marketing executives, production managers, and cost analysts, has generally praised the planning, control, and analytical potentialities of Variable Costing. Fixed costs calculated on a unit cost basis tend to vary. On the other hand, direct costs and the contribution margin per unit tend to remain constant for various volumes of production and sales.

5.1.1 Variable costing as a profit-planning tool:

A profit plan, often called a budget or plan of operations covers all phases of future operations to attain a stated profit goal. Although such a plan includes both long-term and short-term operations, Variable Costing is quite useful in planning for short periods, in pricing special orders, or in making current operation decisions. With its separation of variable and fixed costs and its calculation of the contribution margin, Variable Costing facilitates analysis of cost-volume-profit relationship. Variable Costing aids in

identifying the relevant analytical data for determining the break-even point, the rate of return on investment, the contribution margin by a segment of total sales, and the total profit from all operations based on given volume. Variable Costing also aids management in planning and evaluating the profit resulting from a change of volume, a change in mix, make-or-buy situations, and the acquisition of new equipment.

5.1.2 Variable costing as a guide to product pricing:

The best or optimum price is that which will yield the maximum excess of total revenue over total cost. The volume at which the increase in total cost due to the addition of one more unit of volume is just equal to the increase in total revenue, or a zero increase in total profit, is the optimum volume. The price at which this volume can be obtained is the optimum price. A higher price will lower the quantity demanded and decrease total profit. A lower price will increase the quantity sold but decrease total profit. In highly competitive market, prices are determined through supply and demand interaction. Management regulates supply and attempts to stimulate demand. The primary influences on demand, however, are the consumers. In multi product pricing, management needs to know whether each product can be priced competitively in the industry and still contribute sufficiently to the contribution margin for fixed cost recovery and profit. In making pricing decision, the useful part of a unit cost is the direct cost segment, since it consists of those cost elements that are comparable among firms in the same industry. A long-run pricing policy should, however, make use of a full product cost, i.e., a product cost which includes that portion of fixed capacity cost instrumental under the manufacturing process, as well as including a full share of non manufacturing costs. With the help of a mathematical example we can evaluate the impact of Variable Costing as a product pricing tool-

Use of Variable Costing in Pricing		
Particulars	Option-1	Option-2
Volume in units	10,000	13,000
Variable Costs:		
Direct Materials @ Tk.3	Tk.30,000	Tk.39,000
Direct Labor @ Tk.5	50,000	65,000
Factory Overhead @ Tk.10	1,00,000	1,30,000
Fixed Factory Overhead	1,70,000	1,70,000
Total Cost	Tk.3,50,000	Tk.4,04,000

Absorption Cost Per Unit	Tk.35	Tk.31.08
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For example, assume XYZ Company is producing and selling 10,000 units at a Tk.40 unit sales price when it receives an offer from a foreign distributor to buy 3,000 units at a unit sales price of Tk.32. The absorption cost per unit as shown in the table indicates that this Tk.32 sales price is less than the Tk.31.08 average unit full cost to make 13,000 units. Management may not take advantage of the sales offer if it relies on the absorption cost per unit to make the decision. Instead, managers should use variable costs along with any extra costs of the foreign sale in evaluating this sales offer. With Tk.18 unit variable costs, Tk.40 unit sales price, and Tk.170,000 annual fixed costs, current net income before taxes is Tk.50,000, computed as follows:

Details	Taka	Taka
Sales [10,000 units @Tk.40]		4,00,000
Costs:		
Variable [10,000 units @ Tk.18]	1,80,000	
Fixed	1,70,000	3,50,000
Net Income Before Tax		50,000

If the order is accepted and can be produced without any plant expansion, net income will be Tk.92,000 computed as follows:

Details	Taka	Taka
Sales [10,000 units @ Tk.40; 3,000 units @ Tk.32]		4,96,000
Costs:		
Variable [13,000 units @ Tk.18]	2,34,000	
Fixed	1,70,000	4,04,000
Net Income Before Tax		92,000

XYZ Company should accept the Tk.32 sales price even though it is lower than average unit cost because a unit contribution margin of Tk.10.67 on the new units results. By accepting the sales offer, the company makes a Tk.32,000 contribution margin to the recovery of fixed costs and, after full recovery, to income. Net income of only Tk.50,000 results from continuing to produce 10,000 units. Because the export of the product at a sharply reduced price is unlikely to affect the regular market, the company should accept the

order, assuming it does not violate international trade agreements. Finally, variable costing highlights the serious results that often accompany price cutting. Cutting prices by a certain percentage and trying to increase volume by the same percentage under the assumption that the volume increase will compensate for the price reduction is a common error. To gain market share from a competitor, however, one should understand just how far a cut in price can go before it becomes unprofitable. Managers who understand how price cutting to gain market share seriously affects profits, should be more cautious about cutting prices to undersell a competitor; they may be cutting themselves out of business.

5.1.3 Arguments for variable costing in managerial decision making

Similar to financial accounting, managerial accounting accumulates and analyzes data to make logical economical decisions. "Variable costing" is an accounting decision-making tool that managers utilize for internal reporting purposes. As opposed to "absorption costing," which is a system that considers all manufacturing costs for reporting purposes, many managers argue that variable costing is more effective for decision making because this method excludes fixed overhead costs of goods sold.

5.1.4 Variable costing as a control tool

The Variable Costing procedure is said to be the product of an allegedly incomprehensible income statement prepared for management. By adopting Variable Costing, management and marketing management in particular believe that a more meaningful and understandable income statement can be furnished by the accountant. However, reports issued should serve not only the marketing department but all divisions of an enterprise. It seems, appropriate, therefore, to prepare reports for all departments or responsibility centers based on standard costs, flexible budgets, and a division of all costs into their fixed and variable components. Other managers can examine and interpret their reports with respect to the production cost variances originating in their respective areas of responsibility. Reports constructed on the Variable Costing basis and augmented by the responsible management group are continually reminded of the original profit objective for the period. Subsequent approved deviations from the objective are reappraised in light of the current performance. Accounting by organizational lines makes it possible to direct attention to the appropriate responsibility. Performance is no longer evaluated on the basis of last month or last year, since each period now has its own standard.

5.2 External uses of variable costing

The proponents of Variable Costing believe that the separation of fixed and variable expenses, and the accounting for each according to some Variable Costing plan, simplifies both the understanding of the income statement and the assignment of costs to inventories. To keep fixed overhead out of the reported product costs, variable and fixed expenses should be recorded in separate accounts. Therefore, the chart of accounts should be expanded so that each natural classification has two accounts, as needed—one for the variable and one for the fixed portion of the expense.

5.2.1 Costs assigned to inventory

The differences in ending inventories are caused by the elimination of fixed manufacturing expenses from inventories in Variable Costing. In absorption costing, these fixed expenses form part of the predetermined factory overhead rate and are included in inventories. The exclusion of this overhead from inventories and its offsetting effect on periodic income determination has been particularly criticized by opponents of Variable Costing. It has been observed that the amount of fixed cost charged to inventory is affected not only by the quantities produced but also by the inventory costing method employed—a fact which is largely overlooked. It is often correct but not universally valid to say that when production exceeds sales, absorption costing shows a higher profit than does Variable Costing; or when sales exceed production, absorption costing shows a lower profit than does Variable Costing. In relation to four methods of inventory costing—average costing, First In-First-Out (FIFO), Last-In-First-Out (LIFO), and standard costing [LIFO is not permitted as per International Accounting Standard (IAS)- 2]—an analysis of the differences in operating income under absorption costing and Variable Costing has shown that the usual generalizations about full and Variable Costing hold only under the LIFO and the standard costing methods. However, under the FIFO and the average costing methods, the results are more complex than those considered by the usual generalizations, which therefore do not apply. Managers favor Variable Costing because sales figures guide cost figures. The variable cost of goods varies directly with sales volume, and the influence of production on profit is eliminated. The idea of selling overhead to inventories might sound plausible and appear pleasing at first; but when the prior month's inventories become this month's beginning inventories, the apparent advantages cancel out. The absorption costing income statement also demonstrates the effect of expensing the fixed over or under applied factory overhead resulting from production fluctuations.

5.2.2 Operating profits

The inclusion or exclusion of fixed expenses from inventories and cost of goods sold causes the gross profit to vary considerably from the gross contribution margin. The gross contribution margin [sales revenue-variable manufacturing cost] in Variable Costing is greater than the gross profit in absorption costing. This difference has also resulted in some criticisms of Variable Costing. It is argued that a greater gross contribution margin might mislead the marketing function into asking for lower prices or demanding higher bonuses or benefits. In most cases, however, sales prices and bonuses are based not on gross profit but on operating income.

5.2.3 Financial reporting

The use of Variable Costing for financial reporting is not accepted by the American Institute of Certified Public Accountants [AICPA], the Internal Revenue Service [IRS], or the Securities and Exchange Commission [SEC], nor has it been endorsed by the Financial Accounting Standard Board [FASB]. International Accounting Standard Board [IASB] The position of these groups is generally based on their opposition to excluding fixed costs from inventories.

6. Dangers of variable costing

The simplicity of Variable Costing allows management to easily understand the resulting figures. However, managers may misapply the principle of variable costing. Many accountants contend that variable costing does not provide all the answers or the best answers in certain business situations. Many non-accountants (outsider and insider of companies) use accounting figures. These people have become accustomed to the normal relationship of sales to total costs and to using gross margin and net income data. A change to another accounting method that gives a completely different picture under similar labels may confuse them. Although the purpose of the change in costing methods is to bring about better understanding, it may cause more confusion instead. Another danger is that managers may assign variable costing income a broader significance than it deserves. When sales substantially exceed current production, for instance, variable costing profits are higher than those under absorption costing, and management may take improper action based on these increased profits. These profits may mislead marketing executives to ask for lower prices. Managers may also demand higher employee benefits or sales bonuses when, in fact, there is no justifications for such actions. The major limitations of Variable Costing are as follows:

6.1 Long range pricing policies

Since Variable Costing income is higher than absorption costing income when sales substantially exceed current production, opponents of variable costing argue that managers who receive only variable cost data are tempted to cut prices to the degree the company profits suffer. Yet, an adequate pricing system avoids this because companies allocate fixed overhead on some volume base for long range pricing policies. Admittedly, allocations are somewhat arbitrary; however, more companies are improving their cost allocation techniques as they gain access to computer facilities. Thus, variable costing generates product figures providing little basis for long range pricing policies.

6.2 Fixed costs must be covered

Elimination of fixed overhead costs from inventories is questionable in view of the increased fixed costs automation brings. It is possible to foresee a time when direct material constitutes the only variable manufacturing cost. Thus, the company with the largest fixed expenses would have the smallest unit inventory costs. This appears contrary to management's objective of having expenses covered by sales-regardless of how they value in inventory. With automation, higher ratios of fixed costs to variable costs limit the ability of companies to respond to changes in the economy. While labor intensive industries can cut costs during a recession by lay-off of workers, companies with robots lack this flexibility. This is a serious threat to the usefulness of variable costing and its acceptability for inventory valuation. This is one reason the FASB and the Internal Revenue Service has not recognized variable costing as an acceptable method of inventory costing.

6.3 Separations of variable and non-variable costs

The opponents of Variable Costing argue that while Variable Costing appears theoretically attractive, it cannot be reliably achieved in practice. For example, there are a number of mixed costs which cannot be readily separated into variable and non variable costs. However, this reasoning is misleading. The variable and non variable components can be reasonably distinguished.

6.4 Variable Costing for External Reporting

The principal disadvantage of Variable Costing is its lack of acceptance for external reporting by the American Institute of Certified Public Accountants [AICPA], the Internal Revenue Service, and the Securities and Exchange Commission. Their opposition is highlighted as follows:

6.4.1 FASB position

Even though most accountants agree that variable costing provides valid information for internal decision making, there is no agreement concerning its appropriateness for external reporting. The FASB has not recognized variable costing as a generally accepted inventory valuation method because of its belief that fixed production costs are as much a part of manufacturing the product as are variable costs. In addition, variable costing violates the cost attaching and matching principle.

6.4.2 American institute of certified public accountants

According to AICPA Accounting Research Bulletin No 43, “The primary basis of accounting for inventories is cost, which has been defined generally as the price paid or consideration given to acquire an asset. As applied to inventories, cost means in principles the sum of the applicable expenditures and charges directly or indirectly incurred in bringing a report to its existing condition and location.” This section also states that, “It should also be recognized that the exclusion of all overheads from inventory does not constitute an accepted accounting procedure.”

6.4.3 IASB position

International Accounting Standard [IAS]-2 requires that absorption costing be employed. If an entity uses Variable Costing for internal budgeting or other purposes, adjustments must be made to develop alternative information for financial reporting purposes.

7. Conclusion and Recommendations

A large number of companies now keep their records for both internal and external reporting needs. The records are maintained on the Variable Costing basis for management’s daily needs, and at the end of the year when tax returns and formal financial statements are prepared for regulatory agencies and stockholders, a simple adjustment is made. The fixed factory overhead costs which were excluded under Variable Costing are added back to inventories and cost of goods manufactured, and the net income is adjusted to what it would have been if absorption costing had been used. Under absorption costing net income will tend to vary with production because the deferred fixed costs are included in inventory, whereas under Variable Costing net income will vary with sales. Absorption costing is the required inventory method for external reporting in most countries. Yet, many companies use variable costing for internal reporting to reduce the undesirable incentives to build up inventories that absorption costing can create. The undesirable effects of absorption costing can be reduced in several ways:

- 1) Careful budgeting and inventory planning to reduce management's freedom to build up excess inventory. For example, the budgeted monthly balance sheets have estimates of the dollar amount of inventories. If actual inventories exceed these dollar amounts, top management can investigate the inventory buildups.
- 2) Change the accounting system. Discontinue the use of absorption costing for internal reporting; instead use variable costing. This change will eliminate the incentives of managers to produce for inventory because all fixed manufacturing costs will be expensed.
- 3) Incorporate a carrying charge for inventory in the internal accounting system. For example, an inventory carrying charge of 1 percent per month could be assessed for the investment tied up in inventory and for spoilage and obsolescence when evaluating a manager's performance.
- 4) Change the period used to evaluate performance. Critics of absorption costing give examples in which managers take actions that maximize quarterly or annual income at the potential expense of long-run income. By evaluating performance over a 3-to-5 year period, managers will be less tempted to produce for inventory.
- 5) Include non financial as well as financial variables in the measures used to evaluate performance. Companies are currently using non financial and physical measures, such as the following, to monitor manager's performance in key areas: (a) Ending inventories in units this period/Ending inventory in units last period; and (b) Sales in units this period/Ending inventory in units this period

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MODELLING THE IMPACT OF INTERNATIONAL FINANCIAL REPORTING STANDARD ON CORPORATE PERFORMANCE (A STUDY OF SOME SELECTED BANKS IN NIGERIA)

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Abstract: The research work was based on the modelling of the effect of IFRS on corporate performance in private organizations. The case studies of this work were first bank Nig. Plc, Diamond bank Nig. PLC, zenith bank, Fidelity bank Nig. Plc and United bank of Africa. The data were collected based on the research questions and the annual report of the selected case study banks. Descriptive research design was used in this research project. The aim of the research design is the desire to simplify the complex issue of the modelling of the impact of IFRS on corporate performance for a better understanding. However, the sources of data used for this research is secondary data. The descriptive method was used to analyze the data generated for the research. Regression models were developed to model the corporate performance of some selected private companies. From the findings the researcher observed that there is a need to model the corporate performance of some selected organizations. Based on the above findings the researcher made recommendations that will help to improve the financial system.

Key words: Liquidity, Earnings per share, financial reports, IFRS, Regression Analysis, return on investment (ROI) and Profitability

Introduction

The basis of financial planning analysis and decision making is the financial information. Financial information is needed to predict, compare and evaluate a firm's earning ability. It is also required to aid in economic decision making investment and financing decision making. The financial information of an enterprise is contained in the financial statements.

Financial statement according to Gavgam (2005) is defined as financial information which is the information relating to financial position of any firm in a capsule form.

Financial statement according to Ohison (1999) was defined as a written report that summarizes the financial status of an organization for a stated period of time. It includes an income statement and statement of the financial position describing the flow of resources, profit and loss and the distribution or retention of profit.

Financial statements are source documents of accounting information. They are referred to as the final accounts. Information has been an important factor in decision making process. In recent times, people and organizations try their best to acquire information in a timely manner to aid them as they battle to manage their businesses. The increasing complexity of the society especially, as is manifested in social, political and economic institutions, has necessitated the more, man's quest for more relevant information on a more regular basis. The processing of facts can be traced back to thousand years ago.

Every financial manager has been concerned with the processing of facts or data, about his businesses operation so as to provide the most accurate and timely information to management. In order to provide this accurate and timely information to management, financial manager continuously sought more improved means of processing data. With the advent of industrial revolution, the need for faster, more efficient and also other methods of processing data became apparent. To satisfy these needs, various types of automated devices were introduced into the business world. Of these, electric computer is the most efficient and foremost as well as the fastest, and most sophisticated device built by man to speedy up communication and information system. This technique has immensely helped the Nigerian Banking system to improve in their accounting system and also in decision making (Studymode.com, 2014).

The present trend in the preparation of financial statement is to ensure that IFRS principles are strictly adhered to. Firstly, what do we mean by IFRS?

Many countries use or are moving towards using the International Financial Reporting Standards (IFRS), which were established and maintained by the [International Accounting Standards](#) Board (IASB). In some countries, local accounting principles are applied for regular companies, but listed or larger companies must conform to the IFRS, so statutory reporting is comparable internationally, across jurisdictions (boundless.com, 2014).

The **objective** of this research work is to model the impact of IFRS in corporate performance of the shareholders and/or the investors, other specific objectives of the study include:

- i. To determine whether financial reporting adopted has significance influence on liquidity of banks in Nigeria.
- ii. To determine whether financial reporting adopted has significance influence in earnings of banks in Nigeria.
- iii. To determine whether financial reporting adopted has significance influence on profitability in Nigeria.
- iv. To determine whether financial reporting adopted has significance influence on return on investment (ROI) in Nigeria.

Hypotheses of the Study

For the purpose of this research work and for it to be effectively evaluated and considering the nature and problems associated with banking industry.

The researcher considers the following hypotheses

H₀: There is no significance relationship between financial reporting adopted and liquidity of banks

H_i: There is significance relationship between financial reporting adopted and liquidity of banks.

H₀: To determine whether financial reporting adopted has no significance influence in earnings of banks

H_i: To determine whether financial reporting adopted has significance influence in earnings of b

H₀: To determine whether financial reporting adopted has no significance influence on profitability.

H_i: To determine whether financial reporting adopted has significance influence on profitability.

H₀: To determine whether financial reporting adopted has no significance influence on return on investment (ROI).

H_i: To determine whether financial reporting adopted has significance influence on return on investment (ROI).

International Financial Reporting Standards (IFRS) are designed as a common global language for business affairs so that company accounts are understandable and comparable across international boundaries. They are a consequence of growing international shareholding and trade and are particularly important for companies that have dealings in several countries. They are progressively replacing the many different national accounting standards. The rules to be followed by accountants to maintain books of accounts which is comparable, understandable, reliable and relevant as per the users internal or external.

IFRS began as an attempt to harmonize accounting across the European Union but the value of harmonization quickly made the concept attractive around the world. They are sometimes still called by the original name of International Accounting Standards (IAS). IAS was issued between 1973 and 2001 by the Board of the [International Accounting Standards Committee](#) (IASC). On 1 April 2001, the new [International Accounting Standards Board](#) (IASB) took over from the IASC the responsibility for setting International Accounting Standards. During its first meeting the new Board adopted existing IAS and Standing Interpretations Committee standards (SICs). The IASB has continued to develop standards calling the new standards **International Financial Reporting Standards**.

In the absence of a Standard or an Interpretation that specifically applies to a transaction, management must use its judgment in developing and applying an accounting policy that results in information that is relevant and reliable. In making that judgment, IAS 8.11 requires management to consider the definitions, recognition criteria, and measurement concepts for assets, liabilities, income, and expenses in the Framework.

Requirements of IFRS

IFRS financial statements consist of (IAS1.8)

- i. A [statement of financial position](#)
- ii. A [statement of comprehensive income](#) separate statements comprising an [income statement](#) and separately a statement of comprehensive income, which reconciles profit or loss on the income statement to total [comprehensive income](#)

- iii. A [statement of changes in equity](#) (SOCE)
- iv. A [cash flow statement](#) or [statement of cash flows](#)
- v. Notes, including a summary of the significant accounting policies

Comparative information is required for the prior reporting period (IAS 1.36). An entity preparing IFRS accounts for the first time must apply IFRS in full for the current and comparative period although there are transitional exemptions (IFRS1.7).

On 6 September 2007, the IASB issued a revised [IAS 1](#) Presentation of Financial Statements. The main changes from the previous version are to require that an entity must:

- i. Present all non-owner changes in equity (that is, 'comprehensive income') *either* in one Statement of comprehensive income or in two statements (a separate income statement and a statement of comprehensive income). Components of comprehensive income may *not* be presented in the Statement of changes in equity.
- ii. Present a statement of financial position (balance sheet) as at the beginning of the earliest comparative period in a complete set of financial statements when the entity applies the new standard.
- iii. Present a statement of cash flow.
- iv. Make necessary disclosure by the way of a note.

The revised IAS 1 is effective for annual periods beginning on or after 1 January 2009. Early adoption is permitted.

Method of Data Analysis

The descriptive method of data analysis was used to analyze data generated for the research. This was supported for the research. This was supported by tables showing variables, responses and percentages of the banks earning.

$$\text{Percentage} = \frac{\text{Number of Response}}{\text{Total Number of Respondents}} \times \frac{100}{1}$$

The data generated for this study were analyzed with appropriate statistical techniques. The techniques included percentages and regression analysis. The hypotheses postulated were put in null (Ho). All analysis was done using software called Minitab version 16.1. The hypotheses were tested as follows.

Regression analysis is a statistical tool used to determine the relationship between two or more variables. It determines the nature or direction, extent or degree and causal relationship between variables

(Kothari, 2004). In this study, regression analysis was used to develop a regression model which shows that the approach is expressed in a mathematical equation as:

$$Y = a + b x$$

Where Y is the dependent variables or quantity being predicted = the independent variables

a = the value of Y when = 0, i.e. the interceptor of the line with Y – axis

b = the slope or gradient. It estimates the rate of change in Y for a unit change in X. It is positive for direct and negative for inverse relationships.

Decision Rule

If the calculated correlations, t-tests, goodness of fit tests and regression show significant values, the null hypothesis is rejected, given room for the acceptability of the alternative hypothesis.

But if the calculated results show a non significant value, the null hypothesis will be accepted, while the alternative hypothesis will be rejected.

Presentation and Analysis of Data Based on Research Questions

Data were collected through the copies of the financial reports (i.e. five years of annual reports from each of the selected banks) and were presented and analyzed in this chapter. In this research work, the researcher makes use of tables, frequency, percentages and regression models in the analysis of the data.

Research Question 1

- i. To determine whether financial reporting adopted has significance influence on liquidity of banks

Table 1: Responses to Research Question 1

S/N	Bank Name	Liquidity	Percentage (%) of the Liquidity
1	Zenith (2009)	1.263801	20.6171
2	2010	1.243505	20.286
3	2011	1.207015	19.6907
4	2012	1.219124	19.8882
5	2013	1.196429	19.518
	Total	6.129874	100
1	Fidelity (2009)	1.335846	20.9828
2	2010	1.391316	21.8541
3	2011	1.246674	19.5821
4	2012	1.214443	19.0759
5	2013	1.178102	18.5051
	Total	6.366381	100
1	Diamond(2009)	1.22356	20.9445
2	2010	1.270858	21.7542
3	2011	1.121057	19.1899
4	2012	1.112749	19.0477
5	2013	1.113678	19.0636

	Total	5.841902	100
1	First Bank (2009)	1.424769	22.0585
2	2010	1.589212	24.6044
3	2011	1.14793	17.7724
4	2012	1.158344	17.9337
5	2013	1.13879	17.6309
	Total	6.459045	100
1	Eco (2009)	1.158998	20.6233
2	2010	1.140895	20.3012
3	2011	1.092936	19.4478
4	2012	1.122368	19.9715
5	2013	1.104651	19.6562
	Total	5.619848	100

Table 1 above shows the liquidity of the selected banks (i.e. zenith, fidelity, First bank, Eco bank and Diamond bank). It shows the annual report of the liquidity for a period of five year. The percentage liquidity of the annual report was also observed for the period of five year on the selected banks.

Research Question 2

To determine whether financial reporting adopted has significance influence in earnings of banks.

Table 2: Responses to Research Question 2

S/N	Bank Name	Gross Earnings	Percentage (%) of the Gross Earnings
1	Zenith (2009)	254,147	20.6823
2	2010	169,370	13.7832
3	2011	214,980	17.4949
4	2012	279,042	22.7082
5	2013	311,275	25.3313
	Total	1228814	100
1	Fidelity (2009)	34,716	8.5414
2	2010	55,623	13.6853
3	2011	70,048	17.2344
4	2012	119,137	29.3122
5	2013	126,918	31.2266
	Total	406442	100
1	Diamond(2009)	40,191,657	7.9149
2	2010	70,262,088	13.8366
3	2011	98,163,095	19.3311
4	2012	131,166,141	25.8304
5	2013	168,015,252	33.087
	Total	507798233	100

1	First Bank (2009)	175,390	30.019
2	2010	230,606	39.4695
3	2011	21,395	3.6619
4	2012	95,834	16.4025
5	2013	61,039	10.4472
	Total	584264	100
1	Eco (2009)	6,472,459	10.9618
2	2010	7,924,585	13.4211
3	2011	12,076,495	20.4528
4	2012	15,566,640	26.3637
5	2013	17,005,522	28.8006
	Total	59045701	100

Table 2 above shows the gross earning of the selected banks (i.e. zenith, fidelity, First bank, Eco bank and Diamond bank). It shows the annual report of the gross earning for a period of five year. The percentage gross earning of the annual report was also observed for the period of five year on the selected banks.

Responses to Research Question 3

- i. To determine whether financial reporting adopted has significance influence on profitability.

Table 3: Responses to Research Question 3

S/N	Bank Name	Profitability	Percentage (%)of the Profitability
1	Zenith (2009)	3.416109	9.4308
2	2010	2.164329	5.975
3	2011	3.810851	10.5206
4	2012	9.267073	25.5835
5	2013	17.56454	48.4902
	Total	36.2229	100
1	Fidelity (2009)	0.443211	8.8856
2	2010	1.393566	27.9385
3	2011	1.963353	39.3617
4	2012	0.820884	16.4572
5	2013	0.366968	7.357
	Total	4.987982	100
1	Diamond(2009)	1.889218	8.0631
2	2010	2.273187	9.7019
3	2011	6.20352	26.4765
4	2012	5.900619	25.1837
5	2013	7.163736	30.5747
	Total	23.43028	100

1	First Bank (2009)	0.821626	4.3458
2	2010	4.128893	21.839
3	2011	1.575317	8.3323
4	2012	5.830636	30.84
5	2013	6.549611	34.6429
	Total	18.90608	100
1	Eco (2009)	6.449037	30.7998
2	2010	4.522093	21.5969
3	2011	2.351283	11.2294
4	2012	4.896798	23.3865
5	2013	2.719365	12.9873
	Total	20.93858	100

Table 3 above shows the profitability of the selected banks (i.e. zenith, fidelity, First bank, Eco bank and Diamond bank). It shows the annual report of the gross earning for a period of five year. The percentage profitability of the annual report was also observed for the period of five year on the selected banks to show the rate at which the profitability of the selected banks grow annually.

Responses to Research Question 4

To determine whether financial reporting adopted has significance influence on return on investment (ROI).

Table 4: Responses to Research Question 4

S/N	Bank Name	Return on Investment	Percentage (%) of the return on investment
1	Zenith (2009)	0.178345	13.5812
2	2010	0.096943	7.3823
3	2011	0.329189	25.0681
4	2012	0.337619	25.7101
5	2013	0.371081	28.2583
	Total	1.313177	100
1	Fidelity (2009)	0.196854	19.2323
2	2010	0.19622	19.1703
3	2011	0.213993	20.9067
4	2012	0.227989	22.2741
5	2013	0.188504	18.4165
	Total	1.02356	100
1	Diamond(2009)	0.224104	7.5806
2	2010	0.420646	14.2289
3	2011	0.804864	27.2256

4	2012	0.790195	26.7294
5	2013	0.716464	24.2354
	Total	2.956273	100
1	First Bank (2009)	0.046596	3.3303
2	2010	0.0479	3.4235
3	2011	0.374898	26.7946
4	2012	0.485046	34.6671
5	2013	0.444714	31.7845
	Total	1.399154	100
1	Eco (2009)	0.011538	12.7965
2	2010	0.008565	9.4993
3	2011	0.01271	14.0964
4	2012	0.031691	35.1478
5	2013	0.025661	28.46
	Total	0.090165	100

In Table 4 above shows the profitability of the selected banks (i.e. zenith, fidelity, First bank, Eco bank and Diamond bank). It shows the annual report of the gross earning for a period of five year. The percentage profitability of the annual report was also observed for the period of five year on the selected banks to show the rate at which the profitability of the selected banks grow annually.

Test of Hypothesis 1

The researcher in the study precisely in chapter one formulated a hypothesis and this have to be tested in order to verify the validity of the working hypothesis. The percentages and partial least square regression analysis were employed.

PLS Regression: Banks versus Zenith, Fidelity, Diamond, Eco bank, First Bank

Method

Cross-validation	None
Components to calculate	Set
Number of components calculated	4

Analysis of Variance for Banks

Source	DF	SS	MS	F	P
Regression	4	10	2.5	*	*
Residual Error	0	0	*		

Model Selection and Validation for Banks

Components	X	Variance	Error	R-Sq
	1	0.89655	2.28883	0.77112
	2	0.93641	0.64120	0.93588

3	0.99901	0.19167	0.98083
4	1.00000	0.00000	1.00000

Banks	Coefficients	Banks	standardized
Constant	77.406	0.00000	
Zenith	-101.464	-1.76253	
Fidelity	-0.777	-0.04332	
Diamond	-27.632	-1.29231	
Eco bank	63.954	1.08010	
First Bank	8.808	1.14189	

Decision rule

Percentages explain the statistical analysis of the data which shows the statistical and percentage profitability of the data in each of the selected banks. However, partial least square regression analysis employed shows that there is a significance relationship between the dependent and the independent variables. This shows that the null hypothesis (Ho) is rejected while the alternative is accepted due to the significance of the results. Therefore, it was concluded that the financial reporting adopted has significance influence on liquidity of the selected banks

Test of Hypothesis 2

The researcher in the study precisely in chapter one formulated a hypothesis and this have to be tested in order to verify the validity of the working hypothesis. The percentages and partial least square regression analysis were employed.

PLS Regression: Banks versus Zenith, Fidelity, Diamond, First Bank, Eco bank

Method

Cross-validation	None
Components to calculate	Set
Number of components calculated	4

Analysis of Variance for Banks

Source	DF	SS	MS	F	P
Regression	4	10	2.5	*	*
Residual Error	0	0	*		

Model Selection and Validation for Banks

Components	X Variance	Error	R-Sq
1	0.80409	0.536707	0.94633
2	0.89301	0.063688	0.99363
3	0.96936	0.042463	0.99575
4	1.00000	0.000000	1.00000

Banks	Coefficients	Banks standardized
Constant	0.0697872	0.000000
Zenith	-0.0000016	-0.056316
Fidelity	0.0000026	0.067382
Diamond	0.0000000	0.809139
First Bank	-0.0000006	-0.030329
Eco bank	0.0000000	0.143942

Fits and Residuals for Banks

Row	Banks	Fits	Res	SRes
1	1	1	-0.0000000	*
2	2	2	0.0000000	*
3	3	3	-0.0000000	*
4	4	4	0.0000000	*
5	5	5	-0.0000000	*

Decision rule

Percentages explain the statistical analysis of the data which shows the statistical and percentage profitability of the data in each of the selected banks. However, partial least square regression analysis shows that there is a significance relationship (i.e. R-Sq is 100%) between the dependent and the independent variables. This shows that the null hypothesis (Ho) will be rejected while the alternative will be accepted. This is as a result of significance of the data results. Therefore, it was concluded that the financial reporting adopted has significance influence on gross earnings of the selected banks

Test of Hypothesis 3

The researcher in the study precisely in chapter one formulated a hypothesis and this have to be tested in order to verify the validity of the working hypothesis. The percentages and partial least square regression analysis were employed.

PLS Regression: Banks versus Zenith, Fidelity, Diamond, First Bank, Eco bank

Method

Cross-validation	None
Components to calculate	Set
Number of components calculated	4

Analysis of Variance for Banks

Source	DF	SS	MS	F	P
Regression	4	10	2.5	*	*

Residual Error	0	0	*
Total	4	10	

Model Selection and Validation for Banks

Components	X	Variance	Error	R-Sq
	1	0.56726	0.204600	0.97954
	2	0.84680	0.135594	0.98644
	3	0.95565	0.036852	0.99631
	4	1.00000	0.000000	1.00000

Banks	Coefficients	Banks standardized
Constant	-0.081834	0.000000
Zenith	0.050967	0.205676
Fidelity	0.139630	0.059662
Diamond	0.363340	0.557712
First Bank	0.236216	0.378021
Eco bank	-0.005376	-0.005704

Fits and Residuals for Banks

Row	Banks	Fits	Res	SRes
1	1	1	0.0000000	*
2	2	2	0.0000000	*
3	3	3	-0.0000000	*
4	4	4	-0.0000000	*
5	5	5	-0.0000000	*

Decision rule

Percentages explain the statistical analysis of the data which shows the statistical and percentage profitability of the data in each of the selected banks. However, partial least square regression analysis shows that there is a significance relationship between the dependent and the independent variables. The correlations of the model (i.e. R-Sq) show that the independent and the dependent variables were 100% correlated. The coefficient of the correlations shows that 100% of the independent variables were explained in the dependent variables. The null hypothesis (Ho) is rejected while the alternative is accepted due to the significance of the results. Therefore, it was concluded that the financial reporting adopted has significance influence on profitability of the selected banks

Test of Hypothesis 4

The researcher in the study precisely in chapter one formulated a hypothesis and this have to be tested in order to verify the validity of the working hypothesis. The percentages and partial least square regression analysis were employed.

PLS Regression: Banks versus Zenith, Fidelity, Diamond, First Bank, Eco bank

Method

Cross-validation	None
Components to calculate	Set
Number of components calculated	4

Analysis of Variance for Banks

Source	DF	SS	MS	F	P
Regression	4	10	2.5	*	*
Residual Error	0	0	*		

Model Selection and Validation for Banks

Components X	Variance	Error	R-Sq
1	0.74935	2.04758	0.79524
2	0.90132	0.61258	0.93874
3	0.92457	0.00008	0.99999
4	1.00000	0.00000	1.00000

Banks	Coefficients	Banks	standardized
Constant	9.9418	0.000000	
Zenith	-4.0955	-0.307492	
Fidelity	-52.1548	-0.527903	
Diamond	4.4409	0.722639	
First Bank	2.5493	0.348169	
Eco bank	81.5989	0.519222	

Fits and Residuals for Banks

Row	Banks	Fits	Res	SRes
1	1	1	0.000000	*
2	2	2	-0.000000	*
3	3	3	0.000000	*
4	4	4	0.000000	*
5	5	5	-0.000000	*

Decision rule

Percentages explain the statistical analysis of the data which shows the statistical and percentage profitability of the data in each of the selected banks. However, partial least square regression analysis shows that there is a significance relationship between the dependent and the independent variables. The correlations of the model (i.e. R-Sq) show that the independent and the dependent variables were 100%

correlated. The coefficient of the correlations shows that 100% of the independent variables were explained in the dependent variables. The null hypothesis (Ho) is rejected while the alternative is accepted. This is as a result of significance of the data. Therefore, it was concluded that the financial reporting adopted has significance influence on return on investment (ROI).

Summary of Findings, Conclusions and Recommendations

This chapter aimed to review the problems investigated, summarized the methods adopted in the study, summarized the research findings, draw conclusions and make recommendations.

Summary of Findings

The findings of this research investigated are as follows:

The adoption of IFRS system in financial reporting is beneficial to the selected banks.

The financial reporting adopted has significance influence on annual liquidity of the selected banks

The financial reporting adopted has significance influence in earnings of the selected banks.

The financial reporting adopted has significance influence on the annual profitability of the selected banks.

The financial reporting adopted has significance influence on annual return on investment (ROI) in the selected banks.

Conclusion

From the findings above, there is a need to have published the financial reports of the selected organization, because it helps the investors and the shareholders to have a perfect financial report that will indicate perfect information for investment decision making. However, for financial statement to be more effective in investment decision-making, accountants must try not to become barriers to effective communication in other to attract more investors to the case study banking industries for the growth of the selected banks.

Based on the findings, the researcher made the following recommendations.

Accountants should as well utilize grapevine information because it tends to facilitate social relationship between organizational members.

Accountants should be continuously trained to keep them abreast with the up-to-date development and improved communication.

To enhance communication network effectively for decision-making, the organizational structure and rules should be carved out in such a way as not to limit one's freedom

There is a need to adoption of IFRS system in financial reports which will be beneficial to the selected banks.

There is a need to publish the financial statements of the selected banks in order to attract more investors

There is need to improve financial statements of the selected case study banks annually.

There is a need of effective financial reports in other to attract more foreign investors

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STRUCTURAL CHANGES AND PRODUCTIVITY TRENDS' EVIDENCE FROM JORDAN'S MANUFACTURING INDUSTRY (2000 – 2014)

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Abstract:

This paper investigated the productivity in Jordan industry, and the impacts of innovations, structural changes, technological changes, foreign direct investment, investment, and the effect of treaty and regulations of world trade organization (W.T.O).

In this paper, the data series collected **are** from different sources for the period 2001 – 2014. The data of inputs and outputs were transferred to logarithm. Translog method used **an** estimated series by least square series, once with dummies of industries **and** other times, without a translog prediction function. The other model is utilized in the analysis of data such as fixed effects and random effects to estimate the (KLAMS) function. Then, LML (Limited Maximum Likelihood) method to capture the

coefficients of productivity manufacturing industries in Jordan and estimate the coefficients of independent variables such as chemical and fertilizer, petroleum and service sectors among other factors of production function.

Positive relationship remarked the signs of innovation and technology. TFP and W.T.O. were tagged time.(t-1) is used to show the impact of the total gross productivity on these variable, the elasticity for these variables sometimes is too weak and in some cases, close to one. It means that capital and labor demands are more elastic than demand of materials, foreign direct investment and innovations and structural changes. Hence, the paper presents an alternative set of estimates of TFP growth of Jordan manufacturing industry, the water demand increased in the period of the study within 8% while the industrial productivity increased 5.6% as a compound average.

Key words: TFP (total factor productivity) translog production function,

Jell classification: D₂ / D₂₄.

Section one : Introduction:

Generally, productivity signifies the measurement of how well an individual entity uses its resources to produce outputs from inputs a glance at the productivity literature and its various application quickly reveals that there is neither a productivity have focused on the individual labor productivity estimates are often performed by using combination of analytical techniques and personal judgment (Portas and Abdul rizak, 1997), but worker haves estimates are usually obtained through direct interaction with a scheduler, the site manager or related sub contractors who are knowledgeable enough to reflect the actual condition of project and its constituent. Circumstantial evidence points to the services industries, (Griliches,1994),pointed out that some of services industries in the period 1947 to 1973 whose productivity growth rates were higher than productivity growth the manufacturing industries .Also, innovation means some improvements in productivity and firms' input and output based on acts and audretch results , many more of the innovative firms will have introduced improvements to existing products rather than entirely new goods and services . (Kongsamut,et al ; 1997)making comparison across

countries' results indicates to apposite relationship between the per capita income and the intensity of use of services in manufacturing industries. Industrial firms make use of services procured from outside because of the advantages offered by these services .In the production firms, process service produced generally depends on:

- 1) The relative cost of in –house provision of service as against their procurement from outside agencies which in the firms, culture of employment and type of technology.
- 2) The pressure on the firm to **rise** affected **reduction in** cost and improved competitiveness which depends on the domestic and international competition.
- 3) **Available services** which depend on the level of development of the service **sector** in the economy beyond the management plans **of** the firms.

Rubal Cabo, 2007,taking the new characteristic of the service economy as a basis, his analysis is reasonable; the analysis represents the major share of developed economies and are increasingly integrated in the overall production system.

Secondly, the creation of employments added value and income is increasingly related to good performance economies of services.

Thirdly, they played a more active role in market integration and globalization. This means that the analyses will be deep into the role impact of services in economics growth and productivity. This is one of the most conventional statements in economics with regard to other industrial sectors as whole.

Truly, in this century, all highly industrialized countries have become service economies, as we considered the share of the work force in services and even more so if the employment share in service occupations is considered. As few authors (Schettkat, 2003 and Tocarini, 2006), (Bosworth and Tripeltt, 2001) and (Rubaicaba, 2007) suggested that Baumol's hypothesis may still hold validity for the service sectors as such.

(Messina, 2004; OCED, 2005 a) growth and development of services might be based on

human capital, it is known fact that production in the tertiary sector has a higher amount of qualified labor than in manufacturing the growth of some business services (such as management Consultants has been associated with the accumulation of expertise and specialization processes. (Stanback, 1979), and (Wood, 1991) have the opinion that says competitive pressures associated with market globalization have changed the relationships among companies, thereby increasing the need for modernization and promoting interaction.

(Echevarria, 1979; Kongssamut, et. al., 1997) ;(Xu, 1993); (Kozicki, 1997), assumed a standard in multisectoral growth models that service sector exhibits lower productivity growth than other manufacturing industries .(Bontelsman, et. al., 2006) ;(Hsieh and Klenow, 2009), have focused on the dispersion in total productivity across plants; the former for the arrangement of advanced and semi industrial economies and the latter of china and India. They have found that between a third and a half of the gap in these countries manufacturing TFP via – avis ,would be closed the excess dispersion in plant productivity were removed. There is a parallel between many studies, they attempted to capture the finer details of misallocation with individual sectors and cross plants and firms but a compensating factor may able to track the general equilibrium effects of reallocation. (Diewert and Nakamura, 2009), say that the bias to the input price index will be proportional to the growth in share captured by the low cost supplier and the percentage discount offered by the low-cost supplier, and of growth in the input price index is overstated, productivity and real value added will also be observed and they have using a variety of assumption about the magnitude of the discounts from off shoring.

(Feenstra, et. al., 2009) who documented the effect of various biases in published statistics for aggregate output of measurement problems, which are tantamount to under reported term of trade gains, create a significant upward bias to measured output and multifactor productivity growth in the U.S.A. Changes in the industrial activity (production effects), changes in the structural of production output over time (the structural effects , and changes in energy efficiencies of individual industries, comparison the linkages between decomposition methods and economic index number can be stated for Jordan that analyzed current and future energy requirement for different sectors and

industries. (Abdalat, et.al, 2011). When we study the consumption of energy of Jordanian industrial sector, the paper showed that the main driver behind the energy demand increase between 1998 – 2005 was the rapid increase in industrial production output. However, implying innovation, technical changes, diffusion and adaptability to more efficient technologies and the structural changes in the industrial sector have been countered this rapid increase. (Hanibbaani and Shania, 1989) had estimated two inputs, Cobb-Douglas production function for Jordanian industrial sector 1967 – 1986. They found that production function were decreasing returns to scale over the period of study.

Section two:

2 – 1: Literature review of structural of productivity in Jordan :

1: Productivity: Productivity can be defined as "is the quantity of output that can be produced by using a given level of inputs. At this level of the definition, there is not even a presumption of optimality or efficiency in production. The relationship between output and the level of inputs using a production function which can be express as follows:

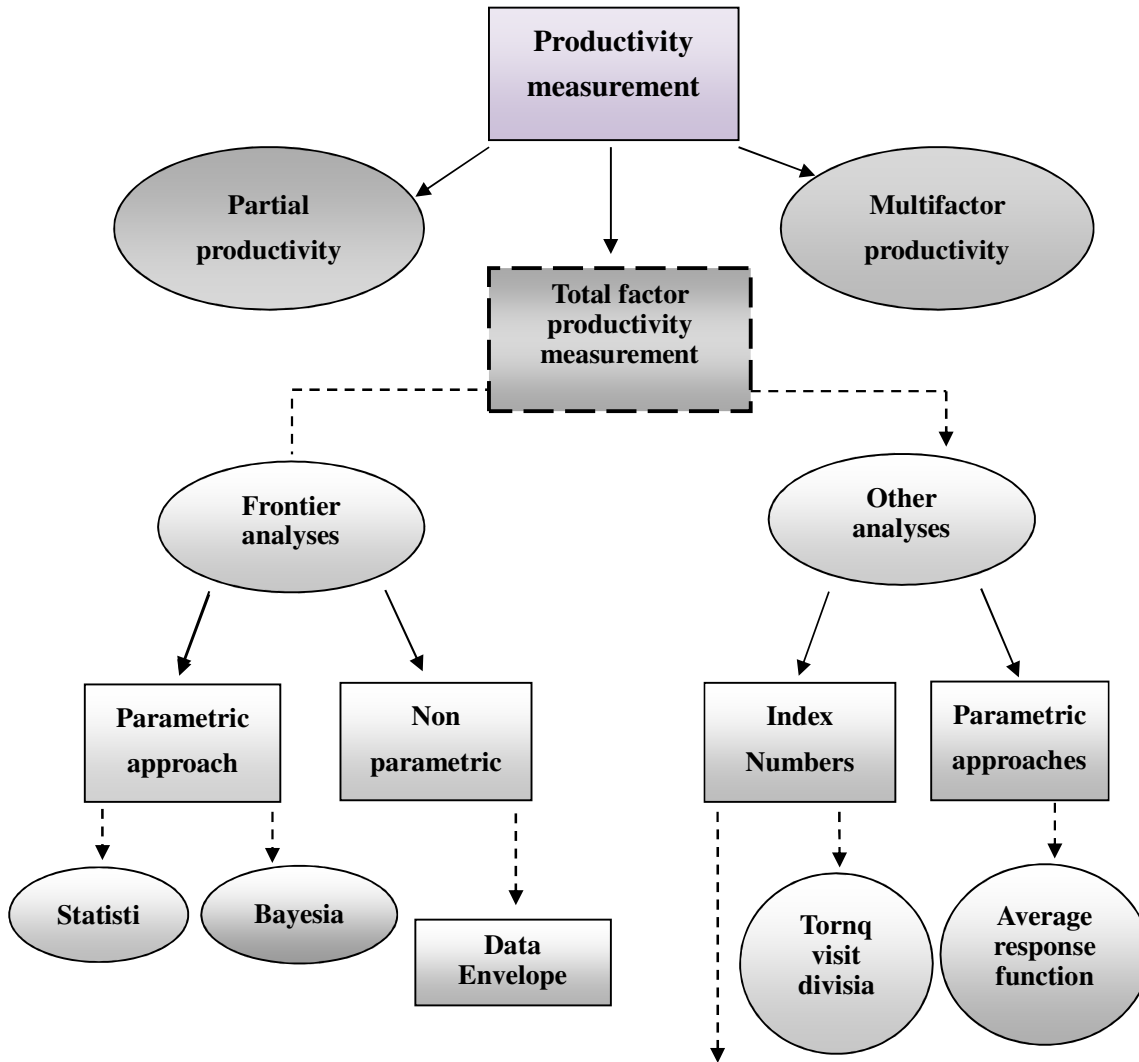
$$Q = AK^a L^B \dots\dots\dots (1)$$

Where: Q is output, K is the capital stock level and L is labor. A is the overall level of productivity which may vary a cross entities. Where Total Factor Productivity (TFP) can be as follows:

$$TFP = a_{it} = a_{it} + ac_{it} + Bl_{it} \dots\dots\dots (2) \quad (i= \text{entity}, t= \text{time}).$$

Two approaches can be used to estimates the parameters A and B. One of them will assume the input markets are competitive, which implies that the coefficients are the share of revenue received by each factors. The second approach assumed that coefficients are constant across entities and estimate them via regression. In essence, some technical change or innovation has been transformed from TFP to its input. Universal productivity indicators have aimed to work out with concept of total factor productivity measures; partial and total factor productivity measures are represented in figure (1).

Figure (1):Measures of Productivity Methodological Approaches



Source: growth and productivity in the service sector the state of the art Universidad de Al Calâ - Andtes moroto – sanchez working paper 07/2010

We can calculate the innovation activity through directed towards new products and product improvement, the demand equation to allow the knowledge stock to shift the demand curve facing the firm:

$$Q_{it} = AP_{it} + \pi k_{it} \quad \pi > 0$$

Assuming the knowledge stock has a positive coefficient implies that the effect of increased knowledge or innovative activity. If two previous equation combining we can obtain revenue equation as:

$$r_{it} = \frac{\eta + 1}{\eta} (a_{it} + Bl_{it}) + \left(\frac{\gamma(\eta + 1) - \eta}{\eta} \right) k_{it} \dots\dots\dots, (4)$$

Two Channels can be measured productivity growth, one of them directly increasing the efficiency of production, and indirect by shifting the demand curve for the firms products outward (η is negative), the analysis of supply side sources of growth of Jordan manufacturing is based on a KLEMS production function estimated by panel data procedure. The equation can be written:

$$Q_{it} = f(k_{it}, L_{it}, E_{it}, M_{it}, S_{it}; A_{it}, \dots\dots\dots)$$

Where: E: energy (fuel and power), M: material, and s: services i and t are for industry and time and A_{it} represents technology, through this term, inter industrial and inter temporal aviation in total (factor productivity are incorporated into the production function a Cobb-Douglas term represents the efficiency A_{it} has been spechified as $\exp(C_i) + \exp(N_t)$, we can use the logarithmic transformation. Therefore the production function can be as follows:

$$\ln(Q_{it}) = a_{it} + a_1 \ln(L_{it}) + a_2 \ln k_{it} + \mu \ln M + \sigma \ln E_{it} + \theta \ln S_{it} + \sum_{it} \dots\dots\dots$$

..... (6)

2 - 2- Intermediate materials:

As depicted, the aggregate share of imported intermediate goods has increased in Jordan trade from 20% to 35% over the period of this study, (2001 – 2014), driven up largely by increasing the detailed product data underlying the aggregate shares. Thus, we can determine the share of countries accruing at which countries expense through the data of Jordanian trade, intermediate share is growing faster than domestic share which has failed.

Implying that advanced input share is falling as well as other developing countries after 2007. Most of the action involves the shifting from domestic sources to developing and intermediate foreign sources. Since there are no direct data sources for this discount spanning the large number of industries of Jordan .Specifically, the price changes were computed when a given firm switches providers to a new

source country of imported goods and services, the structural approach is usually to adjusted the relative prices for compositional quality differences and the true rate of price increase at the elemental level may be written as:

$$\frac{P_t}{P_{t-1}} = (1+i) - (1+i)(S_t - S_{t-1})d \dots\dots\dots(7)$$

Where: P: represents the unit value of homogenous input, S: is the physical share of the output sourced from the low-cost supplier, d: is the percentage discount offered by the low-cost supplier, and (1+i) is the rate price increased from period (t-1) to 1 for the high cost supplier.

2 - 3- Industrial and services sector:

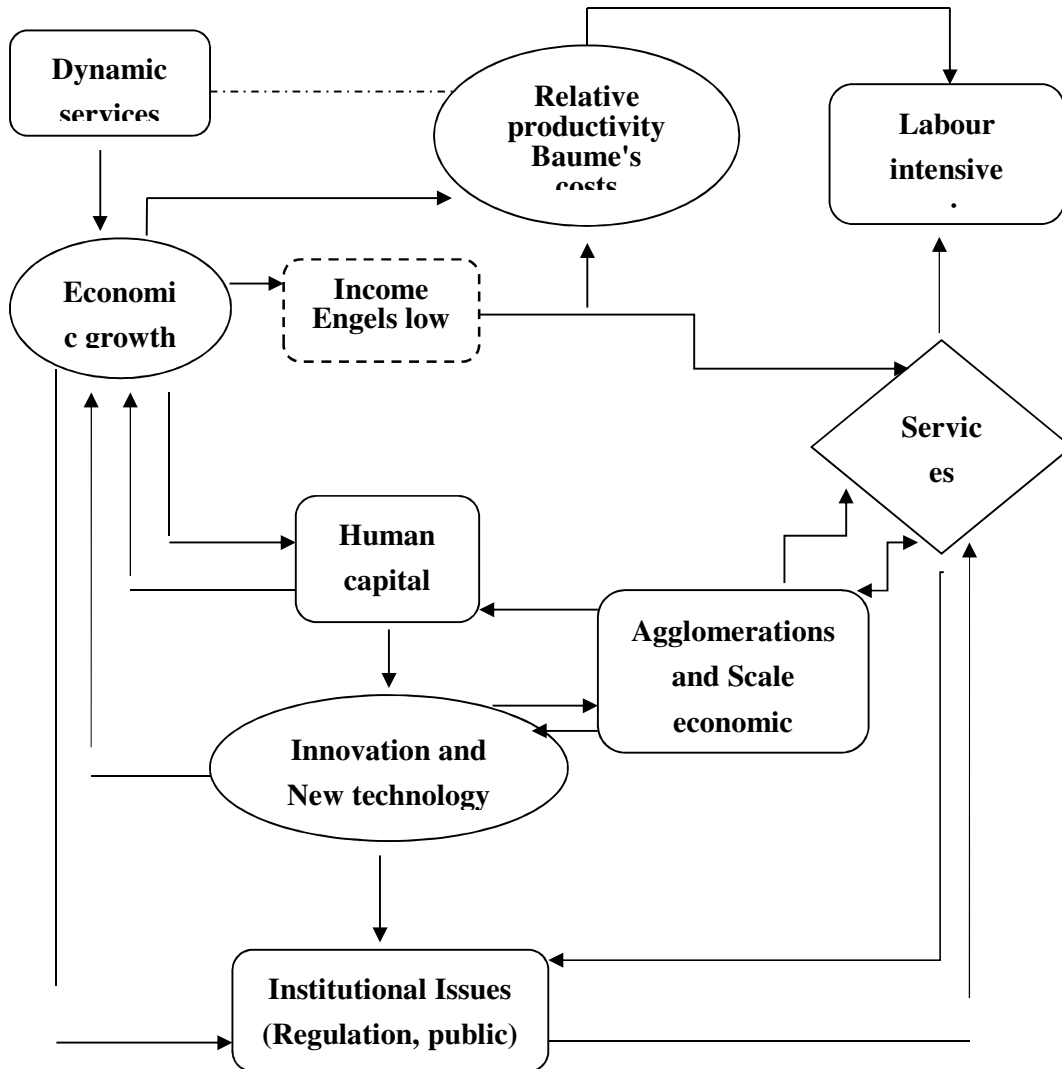
The services sector in Jordan has grown faster than the tradable goods sector (manufacturing, agriculture and mining)during the last 25 years, part of this is due to traditionally slower of the agriculture sector that under lies the conventionally excepted structural transformation from agriculture to manufacturing, However, the rate of growth of services accelerated above that the manufacturing and the growth rate gap has widened in 2005 – up to 2009. In this study as productivity is the main interest we analyzed the prospects of a sustained, rapid growth of the service sector, and put forward arguments in favors or against that possibility of an empirical assessment of the growing importance of service input in manufacturing sector, and the contribution made by services to manufacturing output growth and productivity.

When we have a look at economic growth, the growth rate has been associated with increasing share of services in GDP, investment and employment (Chenery, 1960). The growing recognition that services procured firms is increasingly becoming an important input to manufacturing industries.

2 - 4 - Jordan is influential in various ways:

Apart from the existence of public services and the management of services in liberalization processes, we can also **recreate** public regulations in Jordan, **then, set** a growth factor for some services, such as professional services and the private institutions **which** have also undergone social changes that have boosted the growth of specific services. **Summarily, four types of essential changes can be distinguished as group factors affecting the growth of productivity , namely;** changes in production factors mainly labor and human capital, changes in productive system (flexibility and integration goods **and** services), changes in markets and income (due to economic growth and external economics) and lastly changes in institutional systems (public services, regulations, cultural and social changes); for each of these factors, three decisive elements of current societies interact. We can **summarize** the relationship between services and economic growth as figure (2).

Figure (2) :The relationship between economic growth and the services



This figure can become standard in multi-sectoral growth model to assume that the service sector exhibits lower productivity growth than the manufacturing one, the effect of an expansion of the services sector depends on which services are expanding; such as personal and social services.

2 - 5 - Industrial Water demand:

Industry plays a key role in the process of modernization and economic development as it provides

the frame work within which national resources and factors of production are utilized. Jordanian industry has also developed a significant degree of diversity. Amman chamber of industry classifies it as associate range of productive activities in to 10 subsectors, such as; the mining of national resources (Potash and Phosphate), engineering and manufacturing industries that provide products to meet consumer needs and other requirements. Industrial water use includes water used to manufacture products such as steel, chemical, and paper, as well as water used in petroleum and metals refining. Industrial water use activities include water with drawls from ground and surface water and deliveries from public water suppliers. The total gross output in the industrial sector was estimated at about 10 billion, the intermediate consumption is about is about 6.5 billion, therefore the estimated gross value added is about 3.9 billion, the operation surplus of Jordanian industries amounted to about 1.9 billion in the average period of 2009-2010.

Table (1): shows the economic indicators for Jordanian industries.

Table (1): Economic indicators for Jordanian industries in 2013

Economic indicators	Mining and Quarrying	Manufacture of food products	Industries Total industry	In Jordan Total Economy
Gross output (MD)	896	1.489	10.173	20.853
Intermediate Consumption	277	1.066	6.500	11.011
Gross value added (TUD)	619	423	3673	9.852
Compensation of employees	74	111	744	2.719
Intermediate	146	970	5.912	8.214

consumption of goods (MD)				
Other production expenditure (MD)	131	96	587	2.846
Depreciation (MD)	43	43	342	947
Taxes on production	58	92	678	1.433
Net value added (MD)	577	380	3.331	8.906
Operation surplus (MD)	445	177	1.908	4.754
No of employees	7.334	34397	182.880	749.271
No of paid employees	7.160	30.336	158.643	590.970
Water costs (1000JD)	8.695	6.679	38.031	69.645

Source: CJB 2013. Monthly Statistical Bulletin Retrieved in May 2014.

Jordan's industries consumed approximately 47.3 mcm of freshwater according to an estimation based on water bills and a price of JD 1/m² in 2011. The water price in mining and quarrying is JD 0.48/m³ and for chemical and fertilizer is 0.25 JD/m³ which is equivalent to ground water abstraction costs. Table (2) shows the water values in industrial uses.

Table (2): Economic indicators for industries in Jordan

Economic activity	Water use / m ³
Manufacture of tobacco	132.033
Manufacture of machinery for food beverage	833
Manufacture of machine – tools	1.500
Manufacture of Agriculture and forestry machinery	4.467
Manufacture of other non – metallic mineral products	85.267
Cutting, Shipping and finishing of stone	1.213.900
Manufacture of articles of concrete and plaster	3.580.400
Manufacture of fertilizer and nitrogen compounds	4.612.933
Quarrying of stone and clay	2.413.733
Extraction of cruds petroleum	8.900

Source: CJB 2013. Monthly Statistical Bulletin Retrieved in May 2014.

Table (3): The future water demand (million/m³) in different sector in Jordan

Sector	2020	2030	2040
- Agriculture	10.149	1.156	1.246
- Industry	68	214	272
- Truism	9	11	17

By assuming no intervention to curtail water demand

Tables (2) and (3) showed that the future water demand of industry increased by 23% in 2030 and 19% in 2040 while Jordan was suffering from shortening of water in 2014.

2 – 6 - Structural Changes and Globalization:

The sheer scale of the contribution of structural changes to this reversal of fortune has been marked by microeconomic studies that record significant productivity gains for individual plant or industries.

Law structural changes has made also little contribution to the overall growth in labor productivity in high income countries, Hence, the curious pattern of growth-reducing structural changes that was observed for Latin America was reported in the case of Africa and Asia, this becomes from flows of labor from traditional to modern parts of the economy to be an important driver of growth. We have noted that there is a large gap in labor productivity between the traditional and modern parts of the economy are a fundamental reality of the society in Jordan.

They key promise of globalization was that access to global markets and increased competition would drive an economic resources towards more productive use, enhance a locative efficiency, as trade barriers have come down , industries have rationalized, up graded and become more efficient. We can note three observations in Jordan's economy in table (4):

Table (4)

	Economic wide labor productivity	Sector with high labor productivity	Compound annual growth
1990 – 2005	20.765	Min/services	2.1%
2006 - 2014	26.973	Min/services	1.9%

From: C.J.B. report calculated by author.

Table (5) shows the effect of labor productivity within and component due to structural changes in Jordan's industries.

Table (5) determinants of the magnitude of structural – changes term

	labor production	Within	Component due to

	growth		structural changes
1990 – 2005	2.6%	2.7%	0.52%
2006 - 2014	3.1%	3.4%	0.71%

Calculated by author

6- Consumption of energy in industrial sector:

Energy consumption in Jordan was 4.802×10^6 To E, and distributed between three major sectors, transportation, industrial and residential, the consumption can be seen in table (6), which shows that industrial sector has the second largest consuming sector.

**Table (6): sectoral distribution of the final energy consumption
in Jordan (2001-2019)**

Year	Final energy Transport	Consumption industrial	House hold	Other
2001	38.2%	22.4%	23%	16.4%
2005	37%	22.1%	21.7%	16.7%
2009	36%	23.6%	24.2%	17.2
2011	35%	24.8%	23.8%	16.4%
2014	33.2%	26.2%	25.1%	15.5%

***approximately for the last 4 months of the year**

As we noted from the table, we can see that consumption was distributed mainly between three sectors whose growth rate of consumption with low movements ratio percentage is slow moving but the quantity of energy consumption growth by 5.9% the growth in energy demand can be decomposed into production, structural, and efficiency factor, these factors vary with time.

Table (7) showed this opinion.

Table (7): energy demand decomposition in Jordan's industrial sector

	2005	2010	2014
- production effects	51.653	59.847	64.931
- structural effects	- 13.514	- 12.316	- 14.638
- Efficiency effects	- 27.612	- 23.533	- 22.416

Calculated by author from data of this paper

It is obvious that the most important factor that has shaped the industrial energy demand in Jordan was the production effect. However, the decrease in the energy intensity countered this increase in demand.

Table (8): % Share of energy use and annual growth rate of industries in Jordan 2001, 2005, 2009,

2014

Industry	2001	2005	2009	2014	Compound annual growth
- Mining of chemical and fertilizer minuetts	18.7	19.4	17.3	16.5	- 0.43
- Paper	3.2	3.5	2.9	2.8	- 0.36
- Plastic	2.3	2.4	2.1	1.9	1.2%
- Petroleum	16.4	15.3	17.9	18.4	1.3%
- Iron and Steel	3.6	3.7	4.5	5.3	3.1%

- Cement	26.1	26.2	27.3	28.1	2.5%
- Others	33.3	29.5	2.8	27	---

As the results, table (8) shows that all types of industries have a low annual growth in the period of this study; this means that many technical adaptations have been pointed out and industrial sectors gained improvements in energy efficiency over time in Jordan industries.

7- The value added in Jordan

Table (9) results declare the share of value added and average annual growth rate of the chemical manufacturers and tobacco products were among the largest contribution to the intensive industries, where the added value increased due to the structural changes and globalization and internationals.

Table (9): Shares of value added and Average annual growth of Jordanian industries in percentage

(%)

Industry	2001	2005	2009	2014	% Average annual growth
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- Mining of chemical and fertilizer	13.6	12.3	13.2	11.8	7.8
- Paper	2.4	2.2	2.3	2.1	11.5
- Plastic	2.5	2.4	2.1	1.9	10.5
- Petroleum	3.9	4.1	5.2	5.8	5.2
- Cement	5.8	6.2	6.8	6.3	4.9
- Iron and steel	2.5	3.1	3.7	3.9	5.2
- Other	69.3	69.7	66.7	68.2	7.47

Table (10): Average output factors and TFP to economic growth in Jordanian industry capital

Period	Output growth	TFP growth	Contribution	Labour	TFP%
1996 – 2001	10.21	0.83	73.29	6.61	7.84
2001 – 2005	11.63	2.07	76.12	4.37	10.61
2005 – 2009	12.16	1.57	72.43	9.85	11.73
2009 – 2014	10.46	2.01	78.29	10.16	13.05

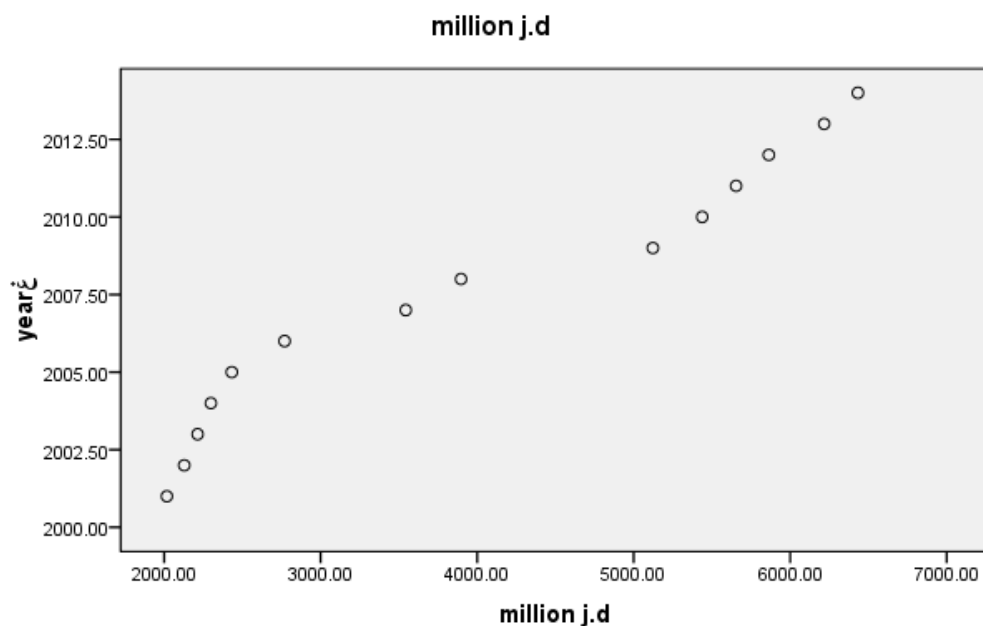
Source : Author's Calculations.

The table results give evidence about the existence of TFP gain under the government planned economy which encouraged the investment. It also illustrates the TFP growth figures which remained positive in the overall reform period despite some decline in some years. Furthermore, Jordanian industry recorded good TFP between 2005 – 2009 and 2009 – 2014, these results supported Jordanian ability to sustain the high rates of industrial growth in the future.

Figure (3) shows the improvement in Jordanian industrial growth, the compound growth in this

sector of Jordan economy is 9.73%.

industrial production in Jordan(2001 - 2014)



Section three : "Data Sources and measurement of outputs and inputs":

The study uses two data sets. One is at a more aggregated level for the industrial sector in Jordan from 1998 – 2014 while the other data set is at a more aggregated level for three main divisions covering 120 digit levels of industries for the period of 2001 – 2014.

1 – 3: Data sources:

Data have been drawn mainly published by Amman industry chamber. Other main sources of data are the Central Jordan Bank (CJB) monthly reports and year Bultan, als Arab unified report has been considered as a main source for the same period of study.–Concordance has been done between the industrial classification used for data, comparable series for the digits have been prepared, the nominal

price have been used on data to obtain the series for 120 industry groups, the series at nominal prices have been deflated to obtain real output and input series, then logarithm has been calculated to the series.

2 – 3: Measurement of inputs and outputs:

- Output: for all series of industry group has been obtained by deflating the nominal figures by whole sale price index.
- Net Capital Net: fixed capital stock at a constant price.
- Labor: total number of workers who are engaged including workers' properties.
- Material input: series of deflated materials to obtain materials input at constant prices.
- Energy: input at constant price by using price of energy then deflated by the number of consumer.

Section four: THE MODELS:

1 – 4: First model:

As mentioned before, the analysis of supply side sources of growth of Jordan manufacturing is based on:

$$Q_{it} = f(k_{it}, L_{it}, E_{it}, M_{it}, S_{it}; A_{it})$$

..... (7)

The cob doglus function has been chosen to be estimated, then, logarithm has been obtained, the equation preformed as:

$$\ln(Q_{it}) = C + N_t + a(n(L_{it}) + BLn(k_{it}) + \Psi Ln(M) + \sigma Ln(E_{it}) + V \ln(S_{it}) + \sum_{it} \dots \dots \dots (8)$$

The results are reported in table (10) by panel data fixed effects model and the random effects model.

Table (10): results of equation estimated for Jordan manufacturing industries.**Dependent variable: Ln (Q).****Period : 2001 – 2014.**

Variables	Fixed coefficients	Effect t-static	Random coefficients	Efface t-stat
Ln(k)	0.0315**	4.282	0.0439*	4.637
Ln(L)	0.0262*	2.143	0.0311*	3.865
Ln (E)	0.0541*	9.077	0.0637*	8.442
Ln(M)	0.375*	52.143	0.429*	51.892
ln(S)	0.093*	12.451	0.133*	11.671
t (time)	0.002*	1.863	0.001*	3.53
R ² (overall)	0.768	---	0.761	
Statics	---	---	6.813	
Chi ²				

* statistically significant at 5% percent level. Q: real value of gross output.

In table (10) results, a rejection of the Null hypothesis implies that the random effects correlated with the other regresses, enhance the estimates from the random effect specification are biased .Two (2) coefficients estimated are statistically significant at 5% level and all of them have positive signs and less than one which is consistent with the underlying theory of producers' behavior.

The hypothesis of constant returns scale is not rejected through these results where the determinant R² (0.768) is for fixed effect and the case of random effects is 0.761 which in general made good interpretation the changes in dependent variable by explanation.

2 – 4: Model II:

The constant – returns to scale translog production function can be estimated as the following model.

$$\ln(Q) = C_0 + a_t \ln L + B \ln k + B_y T + \frac{1}{2} B_{LL} (\ln L)^2 + \frac{1}{2} B_{kk} (\ln k)^2 + \frac{1}{2} B_{TT} T^2 + (B_{LK})(\ln L)(\ln k) + B_{i4} (\ln L)T + B_{kT} (nk) + B_{Lk} = 0$$

$$R_{Lt} + B_{kT} = 0$$

..... (9)

Results of estimation are reported in table (11).

Table (11): estimation of translog production in Jordan's industries

	Estimated by the restricted least squares		Estimated by the restricted least squares and damages	
C ₀	- 0.9376	(- 6.354)*	- 0.6754	(- 3.69)
B _L	0.6387	(5.983)	0.59921	(4.36)
B _k	0.1844	(2.135)	0.1768	(1.397)
B _T	0.0768	(2.347)	0.1931	(2.45)
B _{kk}	- 0.08992	(- 2.193)	0.6972	(-1.238)
B _{LL}	- 0.07673	(- 2.084)	- 0.0635	(- 1.316)
B _{Lk}	0.1345	(2.812)	0.00635	(- 1.365)
B _{LT}	- 0.0294	(3.246)	- 0.003	(- 1.364)
B _{kT}	0.0294	(3.246)	- 0.0003	(- 1.36)
Industry dummies			Yes	
No				
R ²	0.836		0.916	
B _{TT}	-(0.2763)	(-3.897)	- 0.0062	(- 2.63)

*in between parentheses is t – static.

The results of table (11) show that the parameters or slopes are estimated by restricted least square (R. L.S) in both cases, one with dummies and other without, both of them based on panel data.

The mono tonicity and concavity conditions are satisfied at the sample mean, However the fixed effect model with dummies may regarded as less satisfactory than without dummies, because several estimated coefficients are statistically insignificant. Hence, we can derive the electricity of output from the first set of results . The parameters of the translog production function indicates that $B_L, B_k, B_T, B_{Lk}, B_{KT}$ are positive signs. Where in the second model with dummies $B_L, B_k, B_T, B_{LL}, B_{kk}, B_{LT}$ are positive signs, also there is no indication of a growing divergence between labor income and elasticity as use in all the period trends.

3 – 4: The third model

Again, we return to production function of cob – doglus as (Hanel, 2000). Production function consists of two equations ; function of technical progressive and input use function which are as follows.

$$Q_{it} = A_{it} \bullet F_{it} \dots\dots\dots(10)$$

Where: A_{it} : technical progressive function , F_{it} : input function

$$A_{it} = ak_{it}^{-\psi} L^{Nt}$$

$$F_{it} = \alpha X_{mt}^{+m}$$

Where **a**: Constant, **L** : labor Number in t period, ψ : electricity of capital factor, **N** : the direction of technical changes. **Xm**: productivity of capital and labor.

If the substitute in the first equation results is:

$$Q_t = ak_{it}^{\psi} L^{Nt} \Pi X_{mt}^{am}$$

We can get inventory of capital by:

$$K_t = \Delta k_t + (1 - \sigma)k_{t-1}$$

Where: Δk_t : changes in capital in period t. σ : depreciation Average.

If we use the annual growth average of production, we can get:

$$\Delta Q_t / Q_t = \lambda + \sum am \Delta X_{mt} / X_{mt} + \Psi \Delta k_t / k_t. \dots\dots\dots(12)$$

In order to use the total factor productivity we can use the following equation.

$$TFP_{it} = Q_0 + B_1 Qinov_j(t-1) + B_2 I_j(t-1) + B_3 TFP_i(t-1) + B_4 WTO + B_5 WTO + B_5 Tech_j(t-1) + \sum it.$$

Where: **TFP_{j(t-1)}** : lagged time of labour productivity TFP. **TFP_{jt}**: annual average growth of productivity in industries j. **I_{j(t-1)}**: lagged of investment in industries. **Innov_{j(t-1)}**: innovation activities of local industrial sectors. In this phase, we have to use the expense of improvement and scientific research in industries.

WTO: Liberalization of trade of Jordan, we have use the trade balance of each industry. **Techn_{j(t-1)}**: the effect of technical changes in the past year . **Ψ** can be considered as effect of the year technology productivity.

$a_1, B_1, B_2, B_3, B_4, B_5$ are parametes of the economctri c model.

$\sum it$: Error term

I : We have used the LML (Limited it for mation maximum likelihood Method) to estimated the slopes of the model using the data (2001 - 2014). We use LML to series of industrial manufactur ing are represente d in table (12).

Table (12) :

effects of growth of manufacturers' productivity

Variables	Coefficients'	St / error	t – stat	Prob. value
Constant	- 21.376	26.786	- 6.159	0.375
Innova	1529.7	9685.4	2.017	0.0392*
TPF _j (t-1)	- 7.3341	5.1325	-0.876	0.0249*
I _j (t-1)	0.01632	-0.01231	1.963	0.0135*
Techn _j (t-1)	9873.4	38772.3	2.328	0.009*

W.T.O	1.2367	2.231	1.964	0.0355*
D.W .d*	2.769			
D.W (h)	1.653			
R ²	0.782			
R ⁻²	0.714			

* Significant statistically at 5% level.

We can conclude the results of table (12) as the effects of world trade organization being statistically significant at 5% level and has a positive sign.

$I_j(t-1)$ has few effects, the impact is 0.016 and statistically, this appears as macro economic theory of investment where the effect of research and innovation of inside country and outside is high and statistically significant. According to Durbin – Watson test be results, Null hypothesis can't be rejected of reject multi collinearly and serial correlation according D.W.h. 1.653.

II: the second application of LML is to check the effect of output growth in chemicals and fertilizers.

Table (13) shows the results of the impact.

Table (13): The impact of growth of productivity in chemicals and fertilizers industries

Variables	Coefficients'	St / Error	t – stat	Prob. Level
Constant	- 168.57	639.451	- 3.0911	0.003*
Innovation	0.00673	0.02656	2.1334	0.016*
TPF _j (t-1)	0.6229	0.00144	-0.651	0.782*
$I_j(t-1)$	0.462	0.0029	2.923	0.006*
Techn _j (t-1)	0.793	0.1038	3.214	0.019
W.T.O	1.827	10.5571	0.2786	0.673
D.W.d*	2.16332			

D.W (h)	0.765			
R ²	0.6453			
R ⁻²	0.6277			

* **Statistically significant 5% level.**

We noted the effect of I_{t-1} on productivity 0.462 the relation is proportional with TFP_j all coefficients are statistically significance at 5% level, all coefficients have a positive sign, D.W(h) lies in acceptable area, thus we can't reject Null hypothesis due to D.W(h).

4 - 4 : Petroleum Sector: Table (14) shows the impact of petroleum and energy.

Table (14): The impact of TFP on growth of petroleum

Variables	Coefficients'	St / Error	t – stat	Prob. Level
Constant	- 3.6725	5.639	- 0.495	0.706
Innovation	- 0.3675	0.00344	- 0.463	0.539
$TPF_j (t-1)$	0.02663	0.00198	2.2605	0.036*
$Techn_j (t-1)$	0.00321	0.001	2.387	0.012*
W.T.O	0.6783	0.0713	2.763	0.654
D.W.d*	2.1613			
D.W (h)	0.8762			
R ²	0.653			
R ⁻²	0.639			
I (t-1)	0.00267	0.00139	1.8796	0.045*

All coefficient are positive but $TFP_j (t - 1)$ and technology changes and investment $I (t - 1)$ are statistically significant, due to entry of **F.D.I**, **F.P.I**. the foreign direct investment increased in the period of study.

5 – 4: The service sector :

In this sector, we analyze the series by LML method and panel data due to the importance of this sector in gross domestic product in Jordan and the employee of this sector, LML analyses of data series are in table (15).

Table (15): results of LML to the service sector in Jordan industry

Variables	Coefficients'	St / Error	t – stat	Prob. Level
Constant	63.657	12.567	6.318	0.516
Innovation	1.5351	2.614	1.139	0.037*
TPF _j (t-1)	39.622	1.772	0.915	0.018*
I (t-1)	3.871	0.0139	0.087	0.007*
Techn _j (t-1)	0.9624	0.001	0.0076	0.001*
W.T.O	1.392	0.0224	0.081	0.021
D.W.d*	2.117			
D.W (h)	1.156			
R ²	0.7567			
R ⁻²	0.7432			

* Significant statistically at 5% level.

Table (15) : Shows that all coefficients have apposition sign and statistically significant the service sector consist at least not less than 57 percent of industry and not less than 60% of employee in Jordan. Durbin --Watson (h) indicates that we cannot reject Null hypothesis where R² is good , that let us considered that these explanatory interpretation the changes in gross product of service sector as 76%.

The estimation with other method by panel data analyses (fixed effects and random effects) results are available in table (16)

Table (16): The impacts of services productivity in Jordan manufacturing industries are

dependent variables Ln (T FP)

Explanatory variables	Fixed coefficients	Effects t-statics	Random coefficients	Effects t-stat
Ln (service / output)	0.1369*	2.274	0.1224**	2.785
Ln (Tech)	0.0167	1.384	0.0061*	1.437
Ln (FDI)	0.1228	1.981	0.1391*	1.883
Ln (export intensity)	0.0016	0.0937	0.1213*	3.062
Overace R ²	0.273	0.001	0.0076	0.001*
R ⁻²	1.392	0.0224	0.081	0.021
Hausman Statistic			0.139	
X ² (chi 2)			13.272	

**** Statistically Significant at 10%, * Significant statistically at 5% level.**

Coefficient of service variable is positive and statistically significant at 10%, all other coefficients are found to be statistically significant at 5% percent level. It seems reasonable to interpret the results as suggestive of appositive relationship between services and industrial productivity. It seems that the growing use of services in manufacturing industries in the post – reforms period might have contributed to better productivity performance due to improvement in services sector in Jordan services industries.

Section five: Concluding remarks:

In this paper, data series included all sectors of industries in Jordan, the period of data series extended from 2001 to 2014. Multi econometric models are used to analyze the data series in pre and post reform period using capital, labor energy material and services as production function as cob-doglus as a sample to analyze the series explicitly recognizing services as an input to production panel data for 120 industrial groups for the period of 2001 – 2014 were used to estimate production function. Some results brought out

the importance of technological changes in improvement of productivity, also the competition increased in the domestic market were found to be responsible to a certain extent for the increase in the intensity of use of services in manufacturing sector.

Movements in growth rate in index number of industrial production differ from period to others. We noticed that the movement in growth rate in TFP as (real value added) increasingly diverged from the movements in growth rate of industrial production index number, and the largest discrepancy gives a sign that there is impact of technology and increased investment, even foreign direct investment or domestic innovations has a positive relationship with TFP.

Ultimately, the W.O.T has a broader and statistically significant overall productivity trends evaluations, the overall impacts of procession innovation requires consideration of its impacts on prices as well as quantity. Hence, one of the main consequences of innovation is likely to be the exit of some inefficient firms and the entry of new innovative firms.

Also, the energy demanded increased between 2001 to 2014 .Also, the whole demand was a rapid increased in the industrial productions output. However, these results according to implying technological changes and diffusion and adaptability to more efficient technologies and the new structural changes in Jordan industries, also implying innovation, all these factors has countered this rapid increase.

In addition, the water demanded is increasing due to the uses of water for many purposes in manufacturing industries in Jordan. The paper has established the demand of water in the future.

Finally, translog production function as an appropriate production as a well – behaved panel data estimation has used as enhance the results differs. One can conclude that fixed effects are acceptable more than random effects in Jordan industries series.

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VALIDATING A RETAIL SERVICE QUALITY INSTRUMENT IN GROCERY SPECIALTY STORES

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ABSTRACT:

Retailing in India is developing at a very rapid pace. Majority of the retail market is still untapped, and is key factor for global retail giants to make inroads, Formats of shopping malls is becoming attractive for global retail players. Most of the retail giants rapidly adopted the culture of shopping malls in large cities. The shopping malls aim at attracting the customers, in order to provide great buying experience to the customers.

Retailers have to provide quality services from entry to exit of the customer. The term service quality become widely used and implemented in all the sectors especially when service is a top priority. Retail is one arena where business carried out mostly depends on customer experience and satisfaction level. The proportion of organized grocery stores is 5% and it is expected to grow at a compounded annual growth rate of more than 25% with a prediction of Rs 37 lacs crores by 2020.

There is greater opportunity in Indian grocery retailing to exploit the market, therefore providing the best service quality to customers becomes a challenge to retailers .The study gives an overview regarding the service quality and provides a relook at validation and reexamination of retail service quality scale given by Dabholkar et al (1996) in the context of the Indian rural setup especially in grocery stores.

The sample consists of 100 respondents from two grocery stores of Jalandhar district of Punjab. A questionnaire on 5 point Likert scale was used. The findings obtained by using reliability test, confirmatory factor analysis and Structural equation modeling are that this Scale(RSQS) can be validated in the Rural Indian Context of Retail stores of groceries. The implication of retail service quality scale has

been discussed.

Key words

Retailing, Service Quality, Grocery stores, Retail Service Quality Scale (RSQS), Scale validation, Jalandhar.

Introduction

Retailing in the world is the largest contributor to the GDP of around 8% and it also employs one sixth of the labor force of the world (Steven Greenhouse 2012). The Retail segment of India is presently among top five quickest developing markets all over the world and by 2015 it is going to touch Rs 37 lack crores (Anand Dikshit 2011). The greater part over largely developed and changed due to the presence of retail industries, India is no different from the rest and is considered to be the most emerging markets in retail. It has now become the 2nd largest contributor to our GDF next to agriculture (Mohammad Amin 2007). According to a survey conducted by the business consultancy: India's retail market is expected to touch Rs 37 lacs corers by 2020 at a compounded annual growth rate of more than 25%. But the grocery retail has not emerged fully and about only 5% are under organized retail,(fnbnews 2013) but with the starting of big retail chains it is being organized at a very fast pace. The nature of services differs in different categories of services. In grocery retailing maintaining quality as per the expectations of the consumers is very complex because the people are very conscious about their diet and health. So there arises a need for an instrument which can measure the service quality of grocery stores. So the application of retail service quality scale in measuring the gap between the customers' expectations and their perceptions about the service quality of retail stores in jalandher city of Punjab, India.

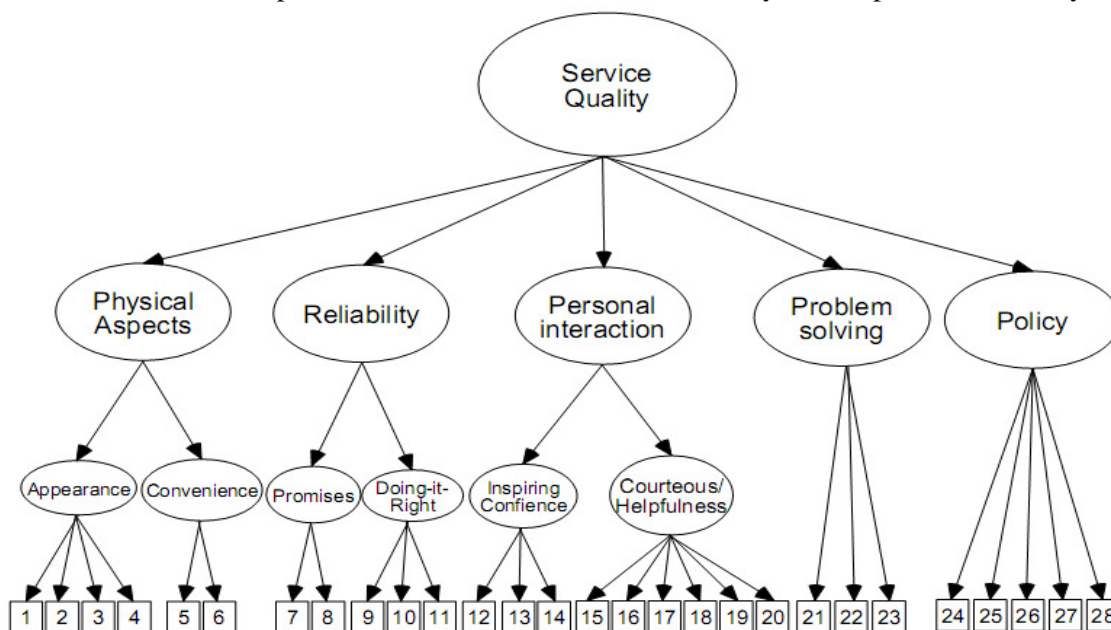
SERVQUAL

Widely popular scale SERVQUAL was developed by PARASURAMAN et al (1988) to evaluate service quality. According to the developers of SERVQUAL, service quality is measured from a comparison between customer expectation and customer perception. The difference which we get from perceptions

and expectations results in the service quality gap ($Q = P - E$), also known as gap 5. A wide gap explains the poor service quality and shows that the service provider needs to improve on the service offered to its customers. PARASURAMAN ET AL (1988) study also suggested that five dimensions, namely, tangible, reliability, assurance, responsiveness and empathy influence service quality perceptions.

RSQS (Retail Service Quality Scale)

Another scale used in our study is RSQS (retail service quality scale) that was developed by DABHOLKAR ET AL (1996). According to Dabholkar et al (1996) retail service quality had a chain of factor structure which comprised of five basic dimensions: - Physical aspects, Reliability, Personal



interaction, Problem solving, Policy.

Literature Review

Service quality involves a comparison of customers' expectation with customer perception. So, they have developed a scale called "SERVQUAL" to measure the service quality, including five dimensions: Reliability, Responsiveness, Assurance and Empathy and Tangibles (Parasuraman et al. 1988). The

service quality in retailing differs from other service or product environments; so a scale was developed to measure retail service quality by Dabholkar, Thrope and Rentz (1996) and coined the name 'Retail Service Quality Scale- RSQS' which has a five dimensional structure (Physical aspects, Reliability, Personal interaction. Problem solving and Policy) they have also identified in their extended study that all these five dimensions were valid in the USA (Gagliano and Hathcote 1994). The RSQS was then applied to the Indian Retail setting with a sample of 144 apparel retail customers selected in Bangalore. the observation was that only four dimensions were appropriate to measure the overall Apparel Retail Service Quality of the store. There is a need to study the RSQS to other cities with comparatively large sample having different demographics to explore new dimensions of retail service quality scale. So it is evident from the earlier studies that there was no generic scale to measure service quality in Indian Retailing (Subhashini Kaul, 2005). SERVQUAL has not been successful adapted and validated in a retail store environment. Based on extensive literature review and findings from their study, they have developed a scale entitled Retail Service Quality Scale that includes 5 dimensions. They are namely Physical Aspects, Reliability, Personal Interaction, Problem Solving and Policy. It is considered as a good scale to be applied to retail business that offer a different mix of service and goods, such as departmental or specialty stores . (Dabholkar et al. 1996). In another study five items designed to measure the scale, the Policy dimension was found to be unreliable in two countries. Personal interaction and Problem solving were combined into a single dimension named Personal attention. Measurement equivalence also did not exist across the US and Korean samples. So RSQS could not be viewed as a reliable and valid measure for cross-cultural comparisons (Kim and Jin (2001). The service quality on Retail stores have a place in the service industry, which offer a mix of goods and service, thus retail product management not only have the common characters of good quality but also have the special characters of services quality. This paper mainly focused on two quality scales of the retailers: SERVQUAL and RSQS, the first is prevailing in universal business service management and the latter is developed specifically for retail stores. The applying situations and the limitations of the two scales are also concluded respectively (WANG Shucui 2003). The other conceptual paper identifies the service

quality dimensions critical to urban grocery shoppers for small, medium, and large-sized grocery stores. It will identify the critical quality dimension of Malaysia urban grocery shoppers based on the Retail Service Quality Scale by Dabholkar et al., (1996) that takes into account the retail setting. (Nor Khalidah Abu 2004)

Scope of the Study

This study has set out to validate the Retail Service Quality Scale developed by Dabholkar et al. (1996) in the Indian business setting. If proven valid and reliable the Retail Service Quality Scale (RSQS) may be further used by researchers and academicians in Indian business setting and particularly in Grocery stores. A large number of upcoming organized retail stores can also use the instrument in enhancing their service quality levels.

Objectives

- The main aim of this study is to look at validation of the retail service quality instrument in rural Indian business setting specifically in context of Grocery stores in Jalandhar district of Punjab.
- To re-examine the RSQS with reference to Grocery retail in Jalandhar district of Punjab.

RESEARCH METHODOLOGY

The study is descriptive in nature and is based on both the secondary data and primary data. The secondary data was collected from books, journals, periodicals, websites etc. and the primary data was collected from a sample of 100 respondents from two national retail chains i.e 'Reliance Fresh' and 'Easy Day present in Jalandhar Punjab. The two national retail stores were selected because of their maximum number of outlets in Jalandhar. The purposive sampling technique was used to collect the data from respondents. The population of the study consisted of consumers who visited these two stores regularly. The present study is based on Respondents, divided equally among selected stores, were surveyed by using a Retail Service Quality Scale (RSQS) and measure the validity and reliability of RSQS dimensions (Physical Aspects,

Personal Interaction, Problem Solving, Policy and Reliability). Confirmatory Factor Analysis (CFA) using AMOS 18.0 was used to test the retail service quality scale factor structure.

Analysis and Discussion

Structural equation modeling using AMOS18.0 has used to test the retail service quality model. Confirmatory factor analysis has been performed on the five basic dimensions of retail service quality scale and the following results are obtained. In order to measure the validation of retail service quality measurement instrument in Indian stores context first of all reliability of the collected data has been checked.

A. RELIABILITY AND VALIDITY RESULTS

1. RELIABILITY ANALYSIS:-

“Reliability is the tendency of a respondent to respond in the same or in a similar manner to an identical or a near identical question (Burns & Bush, 1999).”

“The **internal consistency reliability** is used to assess the reliability of a summated scale by which several items are summed to form a total score (Malhotra, 2004).”

The basic approach to measure the internal consistency reliability is **split-half technique**. In this technique; the items are divided into equivalent groups. This division is done on the basis of some predefined aspects as odd versus even number questions in the questionnaire or split of items randomly. After division, responses on items are correlated. High correlation coefficient indicates high internal consistency, and low correlation coefficient indicates low internal consistency.

Internal reliability of the scale was examined using the **Cronbach alpha** coefficients. The results (Table1) indicate that the retail service quality scale proposed by Dabholkar, Thorpe and rentz (1996) is a reliable instrument, returning an overall cronbach alpha of 0.92. Taking 0.7 and above as indicator of reliability (Nunnally, 1978), we see that all underlying sub-dimensions/dimensions are reliable except the convenience sub-dimension pertaining to Physical aspects dimension of Service quality (alpha=0.63).

An in-depth interview of some shoppers was used to pre-test the instrument. These shoppers were selected because they had visited these stores, at least two times in the last three months and had spent a significantly large amount on shopping during such store visits. The interviews indicated a need to modify the item on ‘complaint behavior’ to be used for measuring discriminant validity. This Item was modified to include in formal cribs made to friends and relatives because formal Complaints at the store were few even if the shoppers had problems with the store service. During these interviews and based on the suggestions of the two store managers, explanations were added for some items to avoid any chance of ambiguity. AppendixII gives a list of all RSQS items used in the final instrument. The instrument also contained a final section collecting data on gender, age and profession of the respondent.

Tasble1: The RSQS Scale and Reliability Results

Dimensions	Alpha Reliability	Sub-Dimensions	Alpha Reliability
Physical Aspects (6 items)	.917	1.1 Appearance(4) 1.2 Convenience(2)	.888 .817
Reliability (5 items)	.856	2.1 Promises(2) 2.2 Doing-it-right(3)	.835 .756
Personal interaction (8 items,1 deleted)	.923	3.1 Inspiring Confidence(3) 3.2 Courteousness/ Helpfulness(5)	.861 .894
Problem Solving (3 items)	.866	None	
Policy (4 items,1 deleted)	.498	None	
Overall scale (26 Items)	.950		

SPSS RELIABILITY ANALYSISOF EACH DIMENSION

As given in the above table the value of Chronbach’s alpha in case of physical aspects is.917, which means this dimension is reliable for measuring the retail service quality. Similarly, personal interaction and problem solving shows the values as.923 and.866 respectively, which are also highly reliable for the service quality of grocery retail stores. Whereas reliability, as a dimension of the scale shows the value of

0.856 along with policy which is .498 which means customers are not very much rely on these two dimensions specially the dimension of Policy of Grocery retail stores.

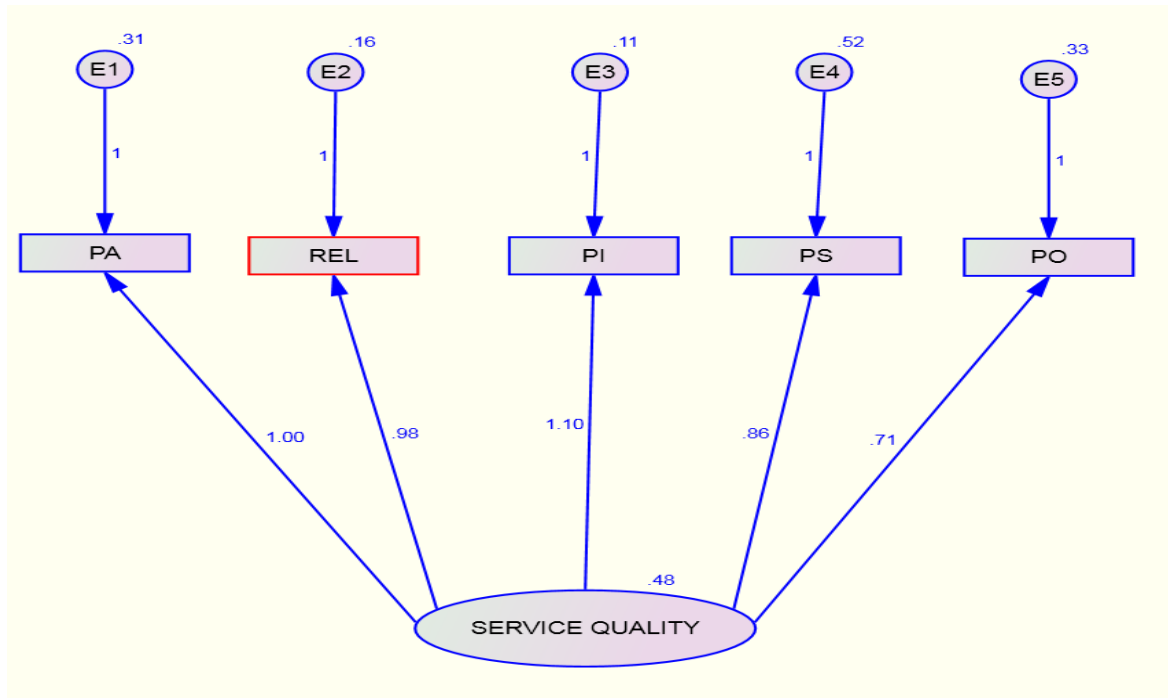
The above statistics show the Cronbach's alpha's value that is .950 of overall scale which indicates very good results of the study means it indicates that the data collected for measuring the validity of the RSQS scale in Indian grocery store context is highly reliable. However, two items/sub dimensions, namely 'telephonic interaction with customers' and 'store own credit cards', as they are not suitable in the Indian context in comparison of another dimension.

2. VALIDITY ANALYSIS:-

Validity is the extent to which a test measures what it claims to measure. It is vital for a test to be valid in order for the results to be accurately applied and interpreted. Validity isn't determined by a single statistic, but by a body of research that demonstrates the relationship between the test and the behavior it is intended to measure. These are:-

I. Content validity:

When a test has content validity, the items on the test represent the entire range of possible items, the test should cover. Individual test questions may be drawn from a large pool of items that cover a broad range of topics. In some instances, where a test measures a trait that is difficult to define, an expert judge may rate each items' relevance. Because each judge is basing their rating on opinion, two independent judges rate the test separately. Items that are rated as strongly relevant by both judges will be included in the final test, so, two items / sub dimensions, namely '*telephonic interaction with customers*' and '*store own credit cards*', as they are not suitable in the Indian context in comparison of other dimension. An improvement in the process used in this study was that in addition to our analysis, two other sources were used to examine the face validity of the items: independent expert faculty members with extensive academic and consulting experience in Indian retailing and store managers of the Grocery specialty stores (Easy Day & Reliance Fresh).



II. Construct Validity

A test has construct validity if it demonstrates an association between the test scores and the prediction of a theoretical trait. Intelligence tests are one example of measurement instruments that should have construct validity.

Figure 1. Path Diagram RSQS Model

B. FIT STATISTICS

The **goodness of fit** of a statistical model describes how well it fits a set of observations. Measures of goodness of fit typically summarize the discrepancy between observed values and the values expected under the model in question Table 2.

Analysis:

Goodness of Fit model Index a measure indicating how well a specified model reproduces the covariance matrix among the indicator variables. These are some results as follow:-

Chi-square is a statistical test commonly used to compare observed data with data we would expect to obtain according to a specific hypothesis. A value below 2 is preferred but between 2 and 5 is considered acceptable. Here we can say that our value is acceptable because our chi-Square is 4.208.

The **GFI**, an absolute fit index, is .961. This value is above the .90 guideline for this model. Higher values indicate better fit.

TABLE2: -FIT STATISTIC IN THE STRUCTURAL EQUATION MODEL

Goodness-of-fit- Model index	Recommended Value	RSQS Model
Chi-square/degree of freedom**	≤ 2.00	7.040/5= 1.408
Goodness-of-fit Index	≥ 0.90	0.961
Adjusted Goodness-of-fit index	≥ 0.90	0.984
Normalized fit Index (NFI)	≥ 0.90	0.963
Tucker-Lewis Index (TLI)	≥ 0.90	.943
Comparative fit Index (CFI)	≥ 0.90	.971
Root mean square Error of approximation (RMSEA)	≤ 0.08	0.000

RMSEA– Root Mean Squared Error of Approximation a value of 0.10 or less is considered acceptable. And it represents the degree to which lack of fit is due to misspecification of the model tested versus being due to sampling error.

The **AGFI** (adjusted goodness of fit index) takes into account the degrees of freedom available for

testing the model. It is given by

$$AGFI = 1 - (1 - GFI) \frac{d_b}{d}$$

Where.

$$d_b = \sum_{g=1}^G p^{*(g)}$$

The **AGFI** is bounded above by one, which indicates a perfect fit. It is not, however, bounded below by zero, as the **GFI** is.

CFI represents the improvement of fit of the specified model over a base line model in which all variables are constrained to be uncorrelated. Our value is 0.971 which is good because it should be >0.90.

Findings

- The two dimensions ‘*telephonic interaction with customers*’ and ‘*store own credit cards*’ are not valid in the context of Indian Retail (Grocery) market or stores.
- The main finding is that this Scale (RSQS) can be validated in the Indian Context Retail stores as results are favorable
- The Indian consumer does not distinguish between service attributes related to Reliability and Policy. An examination of the items indicates that the items in both dimensions have a common characteristic
- The RSQS scale shows good convergent and predictive validity as well as an acceptable level of reliability in the Indian retail setting. Though, the discriminant validity of the scale could not be established, these findings indicate that the RSQS can be used to assess overall service quality in grocery retail stores.

Recommendations

- A large number of upcoming organized retail stores can also use the instrument in enhancing their service quality levels. Being proven valid and reliable the Retail Service Quality Scale (RSQS) may be further used by researchers and academicians in Indian business setting and particularly in grocery retailing.
- The customers in Indian business setting are not yet accustomed with the credit card usage or do not find it as a safe option for payment.

Conclusions and Implications for Retailers

The RSQS validity and reliability in the Indian retail setting indicate that the RSQS can be used to assess the overall service levels provided by the store and for tracking changes in overall service levels over a period of time. But RSQS would help identify only three service areas for focus; a relatively clear dimension of 'Physical aspects', a slightly hazy 'Problem solving' area and one confusing generic dimension of 'Store Policy'. Even the six sub-dimensions are highly collinear not just within the same dimension but even across different dimensions adding to the haziness of dimensions. This severely restricts the usefulness of the scale as a diagnostic tool for providing strategic direction. Retailers wanting greater clarity in identifying areas for service improvement will be disappointed with the RSQS hazy dimensions.

Retailers and researchers applying multi-dimensional service quality scales developed internationally, such as the RSQS in the Indian context are advised to pay special attention to scale adaptation to ensure that the scale has reliable diagnostic ability. International retailers planning a foray into India would require careful re-thinking before applying their existing perspectives on service quality gained in other countries to Indian shoppers.

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A STUDY OF DISCOVERING AND DEVELOPING THE CONCEPT OF SCHOLAR

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Abstract

The paper examines the way to become a scholar. Everyone can try to be a scholar but can not be a perfect scholar without hard practice and patience. A scholar is a person, whose intellectuality is much higher than a common man. He is like world eye and world heart. In this paper we have discovered the various distinguishing features of a scholar and depending on those ideologies, we developed this concept of being a Scholar.

Keywords: Scholar, Nature, Books, Tree, Features of Scholar, Soft hearted man, Source of hope.

1. Introduction

The word 'scholar' is better to describe than define. A scholar is a specialist in a given branch of knowledge. A scholar is a learned person and has great knowledge and extensive research in the field. To become a great scholar one should do in-depth research. This is scholar, who always works for the betterment of mankind and he is the person who unites the man instead of dividing them. "He is like the world eye, he is the world heart" [1].

2. Materials and Methods

Scholar; a store house of knowledge: It is palpable that, for being a scholar a person needs to work hard along with patience.

It is necessary that, Scholar will be a store house of knowledge. That means, scholar should have the vast knowledge about everything. So, it is necessary that a scholar must have to be educated and trained first and to do this there are several ways that he can apply.

2.1. Nature; true master to scholar: Nature has great and enormous influence upon the mind of scholar. The scholar is a man who is attracted most of all by scenes, sights and phenomena of Nature. There is continuity in Nature instead of chaos.

Such as, every day the sun shines and after setting, the stars appear in the sky. Ever the winds blow and ever the grass grows.

Everything used to follow the law of nature. A Scholar should make his life according to the well disciplined rules. Scholar should provide benefit to mankind and should not receive any advantages from mankind as natural things. For instance,

An important object of Nature, which always supply benefit to mankind, though it is used by mankind according to their wish.

And this is tree, which also always gives shadow, fruits, wood, etc. which is very much needed to mankind. A scholar will be

as like as tree, who will be like a shadow, and whenever any problem, difficulty and suffering will come he will take it under

his cover like the shadow of a tree. Scholar will be man of no complaint, no objection rather he will work for the betterment of

mankind. A tree sacrifices everything for giving the benefit, profit and advantage to mankind, in the same way a scholar will

sacrifice everything for all.

It is proved from the history that, nature has given the advantages to the people. As for example, Newton learned from nature

and discovered the law of gravitation. Everything moves according to the law of gravitation. He stated the story "After dinner,

the weather being warm, we went into the garden and drank tea, under the shade of some apple trees...he told me, he was just

in the same situation, as when formerly, the notion of gravitation came into his mind. It was occasioned by the fall of an apple, as he sat in contemplative mood. Why should that apple always descend perpendicularly to the ground, thought he to himself..."[2]. Now this theory is using worldwide and without reading this law of gravitation anybody will not be able to complete his graduation in Physics. So, it is proved that, this is Nature which helped Newton to discover this idea and to work for the people of the world. So, Scholar should have this feeling and excellencies to accept the fruitful attitudes of nature.

Many people thought that the man cannot fly and it was impossible according to some of them. But there were some other persons, who started working to invent the flying machine, by which people can move from one place to another within a short span of time. Many invented this flying machine but when started flying it crashed immediately and they were unable to find out the reason of crush. That was Orville and Wilbur Wright, who learned from nature and eventually able to invent the flying machine. "They studied the way birds move through the air and tried to duplicate it with their models"[3] This is only nature which directly shows the success.

An animal, that always works for its master until the last breath of it's life. It never thinks about himself such as, whether it is getting food or not, even it never thinks about its suffering whether it is day or night, it always serves it's master and never leave it's master's house by the misbehavior of master, rather it always guard and obey its master, even it is ready to sacrifice its life for his master. And this is non other than Dog. Like it, a scholar will not think about his receiving, rather he will always work for the betterment of people. There is a possibility that he will get sufferings from the people instead of reward but a scholar will not leave behind the people, instead of leaving them he will work for the people until the end of time.

So it's clear that, each and every Natural object is serving the human being without thinking the benefit of itself and also providing the message of sacrifice. Scholar will accept these sacrificing tendencies of nature. Nature is a master to Scholar. Nature is always ready to lose it's everything for the betterment of the people.

2.2. Books; a guide, inspiration, and better source : The best way to learn without getting a formal education is to read a lot.

Read as much as you can at every opportunity. This is the way to be a scholar. People in general are largely affected by books.

Books have a profound influence and impact upon all reading people, but especially upon the mind of a scholar. Scholars

should not spend their time idly. Every moment is very much worthy to them. They give value to their time. “Books are

scholar’s idle time” [4]. For getting guide and inspiration every minute scholar will spend. To common people a novel for

instance contains a story but to scholar this is not only a novel but also it’s a picture of life, which contains information of its

age.

2.3. Selection and rejection from books: Books are the best company and friend to men. A friend of no objection. Scholars

when read the books they take the proper juice from the books.”Books are the best of things, well used; abused, among the

worst” [4] . This is only Scholar, who is much aware in selecting and rejecting the philosophy and ideology. And this is true

that, the character of pleasure, which derive from books, is remarkable. Also, there is no doubt that the knowledge we get from

the books is outstanding and noteworthy. It is an important fact that, the idea, which we obtain from book, is not applicable for

all ages. Scholar read books carefully and accept only those ideas that are relevant for his age and reject the irrelevant ones. So,

while reading Scholars absorb everything from the books. But they apply those things, which is fruitful for the nations.

2.3. Understanding of previous scholars: For being a scholar, it is necessary to find out the characteristics and depth of the

previous scholar. Here, it is necessary to have that knowledge to bring out the fruitful and positive outcome of the previous

scholar. While studying the previous scholar, several things will come in front of the eyes, but scholar will acknowledge those

virtues which will bring the fruitful result for the nation. For example, a scholar had done many things for the mass people and

while doing that he sacrificed a lot. So, when a scholar is reading their life, he will accept these sacrificing tendencies of the

scholar and ability of endurance whilst doing the work. It is important that, Scholar will not allow himself to find out the faults of previous scholar. His only duty is to search the beauties of previous scholar and absorb.

3. Distinguishing features of scholar:

There are several characteristics needed to be a scholar, these uniqueness are higher than ordinary characteristics.

3.1. Inquisitiveness: Scholars are naturally curious to know the unknown things and this makes them different from others.

Scholars always want to go to the depth of object. It may say that, natural curiosity and to go the depth of object is an inborn quality of a scholar. Whenever something is happening around us, scholar tries to find out the reason of this, whereas the common people are just observing it, to them this is nothing but to a scholar it's an important and great thing. That is scholar who is not like an ordinary man, that's why he always remembers his responsibility towards the society. This responsibility pushes him to find out the main reason. So that he will work for the society in a proper way. For example, in which way, a doctor wants to know the reason for the illness of the patient and yearn for discovering the root of illness, in the same way, a scholar is yearning for discovering the real fact of the problem. Scholars are people who are naturally curious. They want to know everything.

3.2. Open minded: The mind and heart of scholars are wide like sky and depth like ocean. They are not narrow minded. They know that, whatever they know this is not like Holly speech, it might be wrong. And this makes him totally different than rigid person, who tries to establish his own ideology without thinking the betterment of people. On the other hand, scholars are flexible persons, who always think the betterment of people and for the betterment of common men they can change their mind and can accept the new information. Scholars have to be willing to change their mind when they get new information that challenges their previous views. This is one of the most important skills for a scholar. Be open minded and willing to be wrong,

in the pursuit of being right.

3.3. Free from greed of wealth and reputation : There is a general tendency of people that, they want money, because it is well known that the person who has money can do everything. But this is only the scholar who does not have the tendency to get more money. They do not run after money. Also they do not have the mentality to be popular. That is why they don't do anything that focus and attract the common men to get money or name or fame, rather they do everything, which is productive and which bring benefits for the people.

There is a subtle thing and that is, people will believe and depend on scholar and this is not an easy task to earn and acquire the belief of people. If people don't believe the scholar then it will be very much complicated and difficult to establish the ideology of Scholar. The ideology can be rejected at the very beginning and without accepting the philosophy, people may criticize the Scholar and this is very normal and easy thing, scholar need to consider.

3.4. Service to mankind: It is easy to point out the mistakes of men but it is very much difficult to show the right way. That is scholar who always thinks about the rectification of himself and mankind. So he works as like as Mother for this refinement. He will not find out the mistakes of mankind. A scholar must put humanity as the main objective of each inquiry. He does not hate people, rather he loves all. That's why people comes to him, takes his advice for rectification. In which way, mother loves her child and always thinks about them in the same way, a scholar is always concern about the mankind. This concern makes him totally different. It is found in the society that, people may easily criticize on the fault of men. While discovering and discussing this fault, there is no positive result come. So, that person will not be a scholar who criticizes the error of common men. He is always recovering the fault of men.

3.5. Scholar; a soft hearted man: Scholar should be soft hearted. He will cry not for himself but for the common people. That means when he will see the suffering of men, his heart will be broken. Whatever he has, he will try to spend for the welfare of men. He will not see the other people whether they are spending or not and his mind is not like the man who thinks if the other person do then I will do. Rather he is ready to do every possible thing for the people. Also from history we find that, the men who had feelings for the sufferings of the people they had done many works for them. For example, “Ishwar Chandra Vidyasagar would start crying in distress whenever he saw poor and weak people lying on the footpath and street. He used to spend a part of his scholarships and salary for the welfare of those poor people. He would also buy medicine for the sick” [5]. Like Ishwar Chandra Vidyasagar there are so many people who had soft feelings for the people. Likewise, this is only scholar who has this feelings for the people.

3.6. Active in fulfilling the purpose: A Scholar is neither a silent listener nor an only observer. It is easy to find out the solution of the problem, but without implementation, it is considered as nothing. So, here the important task of a scholar that, he not only will say but also he will work his best to implement it. In other words it can be said that, the soul of a scholar should be active. His active soul will find out the absolute truth at first, and then he will utter this truth and try his level best to implement it. It is well known that, implementation is necessary for getting the fruitful result of society. Without the implementation there is no difference between common men and scholar. It is said that, common people might be able to recognize the solution of the problem but they are unable to accomplish or implement it. Because to implement anything, first, the thing which come in the mind is courage and strength and audacity to implement it. Also it is necessary to have the ability to face the difficulties, which may come. Here, it is found that, though common people find the solution, but when the problem comes they just go behind. On the other hand, scholars are the only persons, who do not go behind whatever the problem

comes rather they are energetic to fulfill the purpose. He sacrifices everything for the implementation of the solution of every problem if needed.

3.7. Acquisition of self trust: “In self-trust all the virtues are comprehended. Free should the scholar be – free and brave” [4].

A scholar is brave in heart. Bravery and freedom are the spiritual and moral qualities of a scholar. Brave is he, who puts fear behind. He does not flee away from danger. He investigates into the nature of danger and controls it. That is scholar, who does not follow the popular opinions. To go against popular opinion with logic is self trust. That is why; scholar goes to the depth of the things and discovers the fact. If a scholar does not have the confidence that His ideology will bring the fruitful result for the common people then he won't be able to apply his ideology. Before applying anything, self trust is important.

3.8. A Role Model to Society: It was a time that whenever a scholar tells anything people just obeyed it but time has changed.

People now want to see that whether the scholar who told the ideology is maintaining his philosophy or not. That means, at present time or in this modern world, Scholar must have to be model in the eyes of common people and it will be possible when a scholar will maintain or will run his life according to the ideology which he told. That time it will be much easier for the common people to run or maintain their life consequently. If not happen, then people will not believe the ideology of the scholar and the role of scholar will vanish. That is why, scholars self rectification is most important for the common people and for himself also.

3.9. Scholar; a person of indiscrimination: Everyone is equal in the eyes of a scholar. There is no class distinction in his eyes.

There is no difference to white and black or with Asian people or African people. Rather scholar will work for everyone. He will break the notion of differences and establish equality. When we search the history we also find it. For example, Ishwar Chandra Vidyasagar initiated the concept of widow remarriage and raised concern for the abolition of child-marriage and

polygamy. He also opened the doors of the colleges and other educational institutions to lower caste students, which was earlier reserved only for the Brahmins [6].

3.10. Source of hope: Present world's people are frustrated. And this frustration comes for even a single reason. Because of this frustration people are going to do different things. Among these things it is needed to mention suicide. People want to commit suicide even not thinking the result of it. There is a general tendency that, everyone just wants to follow the successful person. They are not ready to think about a unsuccessful person. But the gigantic thing is that a failed person can be a role model for society. If an unsuccessful person tells, what are the things he has done and the reason for being unsuccessful, then these ideologies will be an asset for the society. So, here the main duty of scholar is to motivate these unsuccessful persons by telling his duty towards the society. Though this is not an easy task, but scholar first have to realize the mind of that person and have to take the initiatives. Scholar has the ability to change the negative things into positive.

4. Results and Discussion

This is scholar who watches nature as his master. He learns to lose everything for the betterment of mankind from nature. His reading is different than common men. He reads books not only for pleasure rather he reads books to take guide and to find out the possible solution for mankind. His natural curiosities push him to go to the depth of the objects and all this things he does for the betterment of the mankind. And he does not find out the fault of men rather he finds out the high-qualities of men. He neither runs after money nor the fame. Scholars don't be frustrated for the criticism of the people. He lives not for Him but for people. His self trust prevents him to become weaker and shows the fruitful upcoming results. Scholar is a man, who not only reveals the truth but also he tries his level best to implement the truth. He is a man of action. He is a source of hope to every person. He is a man, to whom every person comes to take advice and shelter. He shows the ways of coming pleasure. Every

person believes him, more than myself and trusts him.

5. Conclusion

We have studied the learning places of a Scholar by which he can acquire knowledge at first. We have also studied the distinguishing features of the concept of Scholar by which anyone can develop himself to be a scholar. This research will open new dimensions for discovering and developing the concept of Scholar.

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A STUDY ON INFLUENCING FACTORS TO AFFECT THE ECONOMIC STATUS OF LAYER POULTRY FARMERS IN NAMAKKAL DISTRICT OF TAMILNADU

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ABSTRACT:

Poultry industry is one of the fastest growing segments of the agricultural sector in India. The important aspect of poultry development in India is the significant variation in the industry across different regions. Namakkal poultry farmers faced many constraints in poultry egg production due to climate factor, disease outbreak, poor quality of chicks, lack of quality feed and, Bio security, seasonal variations in egg prices and demand, poor infrastructural facility. The economic status of Namakkal poultry farmers highly influenced by the above said factors in day-today life. Among these factors, the climatic factor ranks first in affecting the economic status of poultry farmers. This factor influences the prices of the eggs, productivity of eggs. We conclude that if the poultry farm is not affected by climatic factor, the revenue would be more throughout the year. This study suggests that the poultry farmers may adopt a suitable precautionary method to prevent the outbreaks by climatic factor. Then the economic status of the poultry farmers will be in equilibrium.

Key terms:

Poultry, Layer farm, Economic status, solution factor, Constraints, Diseases, Egg price fluctuations.

1. INTRODUCTION:

An economy or economic system consists of the production, distribution or trade, and consumption of limited goods and services by different agents [4]. Economics is the social science that studies economic activity to gain an understanding of the processes that govern the production, distribution and consumption of goods and services in an economy [4]. Historically, India has classified and tracked its economy and GDP as three sectors - agriculture, industry and services. Agriculture includes crops, horticulture, milk and animal husbandry, aquaculture, fishing, sericulture, aviculture, forestry and related

activities. Industry includes various manufacturing sub-sectors. India's definition of services sector includes its construction, retail, software, IT, communications, hospitality, infrastructure operations, education, health care, banking and insurance, and many other economic activities[2][3].

2. INDIAN ECONOMY:

The **economy of India** is the tenth-largest in the world by nominal GDP and the third-largest by purchasing power parity (PPP)[5]. The country is one of the G-20 major economies, a member of BRICS and a developing economy that is among the top 20 global traders according to the WTO [7]. India was the 19th-largest merchandise and the sixth largest services exporter in the world in 2013; it imported a total of \$616.7 billion worth of merchandise and services in 2013, as the 12th-largest merchandise and seventh largest services importer [8]. India's economic growth slowed to 4.7% for the 2013–14 fiscal year, in contrast to higher economic growth rates in 2000s[9]. The Indian Finance Ministry projects the GDP growth for fiscal 2014 will be 5.5% [10]. IMF projects India's GDP to grow at 5.6% over 2014-15 [11]. Agriculture sector is the largest employer in India's economy but contributes a declining share of its GDP (13.7% in 2012-13) [6]. Its manufacturing industry has held a constant share of its economic contribution, while the fastest-growing part of the economy has been its services sector - which includes construction, telecom, software and information technologies, infrastructure, tourism, education, health care, travel, trade, banking and other components of its economy.

The economy was then characterized by extensive regulation, protectionism, public ownership of large monopolies, pervasive corruption and slow growth [12][13]. Since 1991, continuing economic liberalization has moved the country towards a market-based economy [12][13]. By 2008, India had established itself as one of the world's faster-growing economies. Growth significantly slowed to 6.8% in 2008–09, but subsequently recovered to 7.4% in 2009–10, while the fiscal deficit rose from 5.9% to a high 6.5% during the same period [14]. India's current account deficit surged to 4.1% of GDP during Q2 FY11 against 3.2% the previous quarter. The unemployment rate for 2012–13, according to Government of India's Labour Bureau, was 4.7% nationwide, by UPS method; and 3% by NSSO method. India's consumer price inflation has ranged between 8.9 to 12% over the 2009-2013 periods [15].

3. POULTRY INDUSTRY IN INDIA:

- The Poultry Business in India is a very old practice and this food industry is one of the important contributors to the economy of rural and semi-urban India. India ranks seventeenth in the world poultry production index.

- Further, India is the fifth largest producer of eggs and ninth largest producer of poultry meat amongst all the countries.

- Indian Poultry Industry is 5,000 years old, since last 4 decades it began to witness remarkable

growth from backyard to poultry industry.

- The organized sector of poultry industry is contributing nearly 70% of the total output and the rest 30% in the unorganized sector.

- The broiler industry is well dominated in southern states in our country with nearly 60-70% total output coming from these states.

- The layer industry once again is represented more in southern states especially, Andhra Pradesh, Tamil Nadu and Maharashtra producing nearly 70% of the country's egg production.

- India's 75% of egg production consumed by the 25% population living in urban, semi-urban areas. Presently more than 800 hatcheries are operating in the country.

- India has emerged as the only country in the developing world a self-reliant, technology driven industry, with capability to produce every essential input for successful poultry farming including indigenous genetic resource and breeding, world class poultry vaccines and medicines, specific pathogen free eggs (SPF), farms and hatchery automation systems, pelleted feed, egg processing, poultry processing, nationwide network of disease diagnostic laboratories and facilities for entrepreneurial development and training in both private and public sectors [16].

3.1 BENEFITS OF POULTRY FARMING:

The poultry farming is very versatile agro-business and it provides some benefits. They are

- It was source of high quality human food. Egg is not only supports in nutritive value, but also it is very easily digested and can be served in different ways. Of this also used in many ways like binders and leavening agents in baking and furnishes richness in ice-cream, sauces, curries and candies
- Poultry farming is highly adaptable under various conditions. It fits well in mixed farming system to provide continuous income to the farmers during their lean periods and also helps to engage their family labor profitably throughout the year.
- It provides employment avenues. There are many diversified types of business allied poultry farming like egg production, broiler production. All these businesses can develop as rural industries, which will have many avenues of employment of rural side particularly among educated unemployed and under-employed persons.
- Poultry waste is an excellent source of organic manure, which can be utilized for growing field crops. It is estimated that if the poultry manure is utilized properly, it could produce more food grains than the birds consume as feed.
- It serves as source of raw materials for industrial products. Eggs have many industrial uses in preparation of vaccines, varnishes, printer's ink, soap, shampoo etc. Eggshells are used as minerals in animal feed. Endocrine glands of birds are used for preparation of hormones and any other biological preparations.

4. PROFILE OF THE STUDY AREA (NAMAKKAL DISTRICT, TAMILNADU, INDIA):

Namakkal District is an administrative district in the state of Tamil Nadu, India. The district was bifurcated from Salem District with Namakkal town as Headquarters on 25-07-1996 and started to function independently from 01-01-1997. The district has 4 taluks (subdivisions); Tiruchengode, Namakkal, Rasipuram, Velur and Kolli Hills(in descending order of population) and has two Revenue Divisions; Namakkal and Tiruchengode. It was ranked second in a comprehensive Economic Environment index ranking of districts in Tamil Nadu not including Chennai prepared by Institute for Financial Management and Research in August 2009. It was major source of Tamil Nadu Economy. As of 2011, Namakkal district had a population of 1,726,601 with a sex-ratio of 986 females for every 1,000 males.

History:

After the struggle between the Cheras, Cholas and Pandyas, the Hoysalas rose to power and had the control till the 14th century followed by Vijayanagara Empire till 1565 AD. Then the Madurai Nayakas came to power in 1623 AD. Two of the Poligans of Tirumalai Nayak namely, Ramachandra Nayaka and Gatti Mudaliars ruled the Salem area. The Namakkal fort is reported to have been built by Ramchandra Nayaka. After about 1635 AD, the area came successively under the rule of Muslim Sultans of Bijapur and Golkonda, Mysore kings and then the Marattas, when about the year 1750 AD Hyder Ali came to power. During this period, it was a history of power struggle between Hyder Ali and later Tippu Sultan, with the British.

Geography

Namakkal district is bounded by Salem district on the north; on the east by Attur taluk of Salem district, Perambalur and Tiruchirapalli District's; by Karur District on the south and on the west by Erode district.

Namakkal District comes under the North Western Agro climatic zone of Tamil Nadu. It is situated in the dividing portion of two watersheds between Cauvery and the Vellar System with the Taluks of Attur, Rasipuram and Namakkal on the East and Salem, Omalur and Mettur on the West. Tiruchengode taluk alone is placed under Western Agro-climatic zone.

Besides the above two zones, Kolli and a few isolated hills and ridges are scattered over Namakkal, Rasipuram and Tiruchengode and along with the valleys and rolling hills, make up the characteristic topography of the district.

Demographics:

According to 2011 census, Namakkal district had a population of 1,726,601 with a sex-ratio of 986 females for every 1,000 males, much above the national average of 929. A total of 150,699 were under the age of six, constituting 78,754 males and 71,945 females. Scheduled Castes and Scheduled Tribes accounted for 20.% and 3.3% of the population respectively. The average literacy of the district was

68.12%, compared to the national average of 72.99%. The district had a total of 475,511 households. There were a total of 898,245 workers, comprising 152,497 cultivators, 228,614 main agricultural labourers, 35,156 in house hold industries, 422,885 other workers, 59,093 marginal workers, 5,976 marginal cultivators, 25,112 marginal agricultural labourers, 3,641 marginal workers in household industries and 24,364 other marginal workers.

Industry

The main occupation in the district is agriculture. The cultivation generally depends on monsoon rains, wells and tanks. Nearly 90 percent of the cultivated area is under food crops. The principal cereal crops of this district are paddy, cholam, cumbu and ragi. Panivaragu, Kuthiraivali, Samai Varagu and Thinai are some of the millets cultivated. Among pulses, the major crops are redgram, blackgram, greengram and horsegram. Among oil seeds groundnut, castor and gingelly (sesame) occupy important places. Of the commercial crops, sugarcane, cotton and tapioca are some of the important crops. Tapioca is used for the manufacture of sago.

Namakkal district is noted for Truck and Lorry external body building which dates back to 1956. Throughout India Tiruchengode is known for its Body Building industry for Trucks, Trailers, Tankers and Rig Unit. Finished trucks and Rig Units are even exported to foreign countries from Namakkal. Nearly 25000 people are employed either directly and indirectly in truck body building activity and about 300 units in Namakkal and 100 Units in Tiruchengode are engaged in this activity.

Poultry development has been rather phenomenal in the district of Namakkal. The district is also well known for its poultry and dairy industries, accounting for a bulk of supply of poultry products to neighbouring industries. In fact, Namakkal produces about 65% of the egg output of Tamil Nadu.

5. FACTORS AFFECTING THE EGG PRODUCTION:

There are many factors that can adversely affect egg production. Unraveling the cause of a sudden drop in egg production requires a thorough investigation into the history of the flock. Egg production can be affected by such factors as feed consumption (quality and quantity), water intake, intensity and duration of light received, parasite infestation, disease, and numerous management and environmental factors [17].

Following sharp declining in prices, egg farmers in Namakkal, which accounts for 20 per cent of country's production, is now seeing some price correction. Poultry farms in the Namakkal cluster in Southern Tamil Nadu produce around 3.08 crore eggs a day. About 40 per cent of the total eggs are consumed by the Kerala market and by schools in Tamil Nadu under the free meal programme. Around 45 lakh eggs are supplied a day for the Mid-day Meals scheme, according to sources. The other major market was Hyderabad. Every day around 30 lakh eggs are exported from Namakkal.

The increase of demand in Hyderabad now has an impact in the price of eggs in Namakkal. If the demand is high in Hyderabad, the eggs from Namakkal could be transported there, which helps the distributors. The ban on fishing in the west coast of the country, such as in Kerala, has increased demand of eggs there and generally, during the rainy season the demands are high, which is the reason for the increase in prices. Given the current trend, the prices are expected to go up further in the coming days, which would help the poultry farmers who has been suffering in the past. Consumption is also good in Mumbai and Gujarat and this is reflecting in the increase of prices in the national level.

Orders from all the three major consumers - Andhra Pradesh, Kerala and Tamil Nadu -- dropped drastically, which in turn brought down the rates drastically earlier, says the Egg Producers Association representatives. Order from the Tamil Nadu Government was reduced due to the Election Code of Conduct on supplies for mid day meals.

6. RESEARCH METHODOLOGY:

This study is an empirical study based on survey method. The data collected for the study both primary and secondary data collected from journals and magazines. Primary data were collected directly from the farmers through personnel interview method aided by a schedule. Secondary data has collected from various books, journals, magazines, periodicals, reports, websites, official documents and unpublished thesis and veterinary doctors.

Field work:

The field work was carried out during the year 2012 to 2014. Each interview took about half a day. Nearly 350 poultry farm entrepreneurs were interviewed for collecting data. The interview was conversational in style and respondents were made to feel at home and easy.

Limitations:

Estimation of the economic status for the previous years was difficult. Most of the poultry farmers do not keep correct accounts of their receipts and expenditures or any other statistical data. Most of them are given by the respondents only from their memory which may not be accurate. However, every effort has been taken by researcher to collect the data as accurate as possible.

6.1 DATA COLLECTION:

After identifying and defining the research problem and determining specific information required to solve problem, the researchers task is to look for the type and sources of data, which may yield the defined results. Generally, the researcher straight away resorts to survey method for data collection.

Primary Data:

Primary data may pertain to socio-economic characteristics of the entrepreneur attitudes and opinions, their awareness, knowledge and other related aspects, like education, monthly expenditure etc.

Data Collection method:

The primary data has collected with the help of structured interview schedule and it has supplied to the selected respondents. Secondary data has collected from various books, journals, magazines, periodicals, reports, websites, official documents and unpublished thesis.

7. ANALYSIS OF THE STUDY:

Data on National Egg Coordination Committee (NECC) Namakkal, egg price for the three years from 2012-2014 was collected from the secondary sources and analyzed for understanding the trends of egg prices during this period. Centralized Moving Average Method was employed in this Time Series data and forecasting of egg price for 2014 was carried after putting factors for cyclical and seasonal trends. Considering the egg prices during this period, mean annual price index for the three years were Rs.292.02, 339.57 and 315.41. Highest egg price was reported predominantly in the month of November and lowest in April.

Season	Duration	2014	2013	2012
Winter	December-March	335	329.6	269.2
Summer (Pre-monsoon)	April-June	298.8	318.3	270.2
Rainy (Monsoon)	July-September	307.1	330.1	319
Autumn (Post-monsoon)	October-November	330.3	367.8	312.3

Table 7.1 Season wise average egg price in the study period

As per season wise analysis, lowest egg price was reported in summer and highest in Post monsoon

period. The mean difference between highest and lowest egg price in the year 2014 was 36.2, indicates the high fluctuations in the egg prices during the reported period. Based on the table, the highest egg price was forecasted in November -2014 (Rs.353.83) and lowest in April -2014(Rs.258.13) with the mean annual egg price of Rs.315.41

Month	Year		
	2014	2013	2012
January	343.87	336.9	284.58
February	319.82	365.86	261.66
March	294.94	310.16	261.39
April	258.13	296.67	230.33
May	314.52	289.45	269.45
June	323.83	368.9	310.83
July	316	334.68	290.03
August	282.26	323.55	311.03
September	323	332	356.07
October	306.68	345.84	314.52
November	353.83	389.77	309.17
December	348.1	381.16	305.29
Average	315.41	339.57	292.02

Table 7.2 Month wise Average Egg price during the Study Period

The above table shows the average egg price for month wise in the study period. These average prices have applied to a graph.

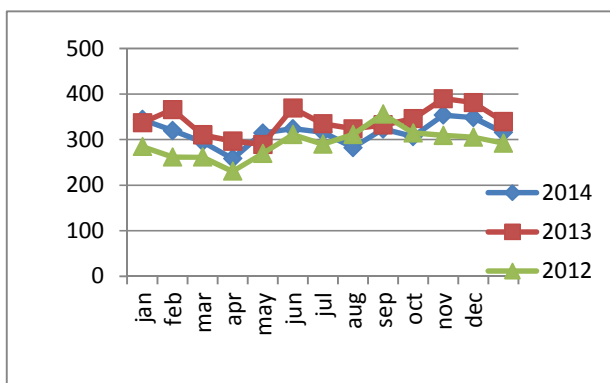


Figure 7.1.a Graph for Month wise Average Egg price during the Study Period

The above graph shows the average egg price in the study period. The information from the above graph the summer period the poultry farmer’s economic ratio has got down in each year. This economic fluctuation has created by the climate.

Month(2014)	Average Maximum Temperature (in Celsius / Namakkal District, Tamilnadu)
January	30.645
February	33.285
March	36.193
April	39.767
May	37.806
June	38.833
July	37.677
August	36.774
September	37.067
October	33.548
November	30.067
December	30.162

Table 7.3 Average Maximum temperature has recorded in the Study area in the year 2014

The above table shows the Average Maximum temperature has recorded in Namakkal District, Tamilnadu, India. Due to climate factor the birds had been suffered by combined diseases. So, the people do not prefer to take these kind of foods in the summer period.

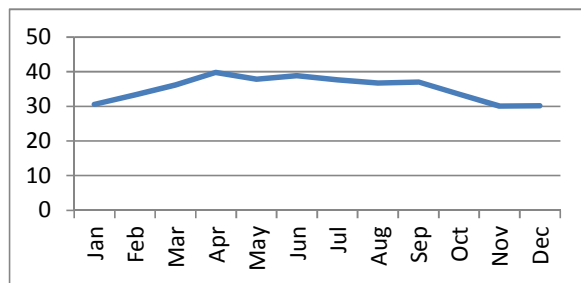


Figure 7.1.b Graph for average maximum temperature in the study area during the year 2014

The above graph shows the average maximum temperature recorded in study area. In this study conclude that the summer period the birds were being affected by the combined diseases. Due to increase the economic status of the poultry farmers we have to give the precautionary measures which have to follow the poultry farmers in the summer period. If the poultry farmers save the birds from disease outbreak during the summer period, definitely they will get unfluctuated economic status.

Month	Diseases	Disease Outbreaks	Average Production
January	Ranikhat	3/100	85%
February	Ranikhat	2/100	87%
March	Ranikhat, ILD	6/100	81%
April	Ranikhat, ILD	5/100	82%
May	VVND, ILD, Ranikhat, (combined diseases)	9/100	80%
June	Ranikhat	3/100	85%
July	Ranikhat, ILD	4/100	84%
August	Ranikhat, ILD	2/100	87%
September	Ranikhat, ILD	2/100	87%
October	Ranikhat, ILD	2/100	87%
November	Ranikhat, ILD	3/100	85%
December	Ranikhat, ILD	2/100	87%

Table 7.4 The birds affected by Diseases in the particular time duration in the study area

The above table shows the birds affected by Diseases in the particular time duration in the study area and the poultry farmers getting the outbreaks which was created by the diseases. The above table shows the poultry farmers had achieved the production to this extend in the study area in the year 2014.

8. VARIOUS DISEASES OCCURANCE IN POULTRY:

Prevalence of various diseases in layers is discussing in this section under various subsections as follows:

MAREKS DISEASE:

Mareks is one of the important diseases of chicken characterized by leg paralysis and lymphocyte infiltration of brachial and sciatic nerves, potentially causing 4.2-20.8% mortality in layers.

INFECTIOUS BURSAL DISEAS (IBD):

Infectious Bursal Disease (IBD) also known as Gumboro had been reported to cause heavier losses in chickens (75 - 85%). The disease is characterized by lameness, severe morbidity and mortality in chicken. It is considered as AIDS of the chicken, because it adversely affects the chicken's immune system.

NEWCASTLE DISEASE (ND)

Newcastle disease is one of the destructive diseases of chickens characterized by severe mortality, greenish diarrhea and thirst. The birds tend to drink more water and decrease their consumption of feed. Newcastle disease caused 60% losses in egg type layers (Savic, 1999); however, lower losses of 12.58% had also been reported by Srithar et al. (1997). On any standard these losses were high because the increase in mortality beyond 8-10% was not admissible in egg type layers. Aside from higher mortality, Newcastle disease caused a 15% drop in eggs of infected flocks and simultaneously resulted in 5% soft shell eggs.

INFECTIOUS CORYZA

Infectious coryza is also an important bacterial disease of chickens characterized by respiratory complications, swollen head syndrome, nasal discharge and severe drop in egg production. The most common cause is *Haemophilus gallinarum*. Conditions of poor hygiene, chilly environment and adverse climate exposure could work as predisposing factors for the onset of this disease. Chickens of all type and age were found susceptible to this infection and the disease caused 2-5% mortality and 35% drop in egg production.

INFECTIOUS BRONCHITIS (IB)

Highly infectious viral disease characterized by respiratory symptoms, increased mortality and decreased egg production. The disease could occur at any stage of the chicken's life and during any season of the year. However, it was found to be more prevalent (35.7%) in 7 days to 5 weeks of age with special reference to its higher incidence (66.6%) in the winter season.

AVIAN INFLUENZA

Avian influenza is an important poultry disease that had emerged with higher mortality in the recent decades. This disease caused 90% morbidity and 80% mortality in 30 week aged chickens. Pathogenicity of avian influenza was more in egg laying birds than in broilers.

MYCOPLASMOSIS

Mycoplasmosis is a series of bacterial infections caused by bacterium mycoplasma of various types in egg type layers. Mycoplasmosis results in severe economic losses in egg type layers in terms of reduced egg production and higher mortality.

SALMONELLOSIS

Salmonellae, one of the bacterial species, are abundantly found in most of the areas where chances of contamination are greater; primarily poultry sheds and feed reservoirs. Salmonella had also been isolated from litter (42%), drinking water (36%), feed (28%) and water tanks (17%) in poultry premises.

COCCIDIOSIS

Coccidiosis a protozoan disease, is one of the major problems of the chicken industry, characterized by blood tinged feces, ruffled feathers, loss of appetite, poor growth and reduced egg production. Coccidiosis had been reported to result in higher mortality (51.38%) and economic losses (\$35 to \$200 million/year in USA; Hofstad et al., 1978).

YOLK SAC INFECTION

It is one of the most common bacterial infections of chicken observed during the first few weeks of a chicken's life. Drowsiness, minimal mobility, vent pasting and the lack of interest of feeding in the chicken characterize yolk sac infection. There may be several predisposing factors such as poor hygiene and stressful conditions leading to this anomaly because, it is a general bacterial infection.

ESCHERICHIA COLI (E. COLI)

E. coli is one of the major problems in chicken production influencing heavier losses and severe drop in egg production. About 5.5% mortality and 10-20% drop in eggs was observed with E. coli infections in egg type layers reared in cages (Qu et al., 1997). Zanella et al. (2000) also reported 5-10% mortality due to E. coli infections with no pronounced signs, suggesting that the infection may be there but couldn't be easily detected until regular tests are performed for its proper diagnosis.

EGG PROLAPES AND CANNIBALISM

Egg prolapses has become one of the major issues in egg type layers during the past few years. Egg prolapses could cause higher mortality and in turn, would result in huge economic losses (Tablante et al., 1994). The authors reported 9.4% egg prolapse cases in egg type layers. Abrahamsson and Tauson (1998) reported cannibalism as the picking habit of chicken, causing 4-20% mortality.

AFLATOXICOSIS

Presently, aflatoxicosis is one of the major issues in chicken production. The common cause of aflatoxicosis is contaminated feed, resulting in higher mortality and severe drop in egg production. Prathapkumar et al. (1997) reported 10% mortality and 20% drop in egg production due to aflatoxin B1 in the diet. Drop in egg production was as high as 26-55% with increased level of aflatoxin B1 (Mukopadhyay et al., 2000). To avoid such losses it is important to regularly monitor feed quality. In case of aflatoxicosis, change of feed will be a better option. Choudary (1986) also reported reduction in mortality and gradual increase in egg production when feed suspected for aflatoxicosis was changed.

INTERSTITIAL [LUNG DISEASE](#)

Interstitial [lung disease](#) is a general category that includes many different [lung](#) conditions. All interstitial lung diseases affect the interstitium, a part of the lungs' anatomic structure. The interstitium is a lace-like network of tissue that extends throughout both lungs. The interstitium provides support to the lungs' microscopic air sacs (alveoli). Tiny blood vessels travel through the interstitium, allowing gas exchange between blood and the air in the lungs. Normally, the interstitium is so thin it can't be seen on chest X-rays or CT scans.

Types of Interstitial Lung Disease

All forms of interstitial lung disease cause thickening of the interstitium. The thickening can be due to inflammation, scarring, or extra fluid (edema). Some forms of interstitial lung disease are short-lived; others are chronic and irreversible.

Some of the types of interstitial lung disease include:

Interstitial pneumonia: Bacteria, viruses, or fungi may infect the interstitium of the lung. A bacterium called *Mycoplasma pneumonia* is the most common cause.

Idiopathic pulmonary fibrosis: A chronic, progressive form of fibrosis (scarring) of the interstitium. Its cause is unknown.

Nonspecific interstitial pneumonitis: Interstitial lung disease that's often present with autoimmune conditions (such as [rheumatoid arthritis](#) or scleroderma).

Hypersensitivity pneumonitis: Interstitial lung disease caused by ongoing inhalation of dust, mold, or other irritants.

Cryptogenic organizing pneumonia (COP): A pneumonia-like interstitial lung disease but without an infection present. COP is also called bronchiolitis obliterans with organizing pneumonia (BOOP).

Acute interstitial pneumonitis: A sudden, severe interstitial lung disease, often requiring life support.

Desquamative interstitial pneumonitis: An interstitial lung disease that's partially caused by [smoking](#).

Sarcoidosis: A condition causing interstitial lung disease along with swollen lymph nodes, and sometimes [heart](#), skin, nerve, or eye involvement.

Asbestosis: Interstitial lung disease caused by [asbestos](#) exposure.

Causes of Interstitial Lung Disease

Bacteria, viruses, and fungi are known to cause interstitial pneumonias. Regular exposures to inhaled irritants at work or during hobbies can also cause some interstitial lung disease.

RANIKHET DISEASE

Ranikhet disease, also known in the West as Newcastle disease is a contagious and highly fatal disease of flocks. In spite of the notable work done towards its control, this disease still ranks as one of the most serious virus diseases of poultry. The disease occurs in almost all countries and usually assumes a severe form affecting birds of all ages. Mortality in flocks varies from 50 to 100 per cent.

Ranikhet disease is largely a disease of flocks, but it also affects turkeys, pigeons, geese, ducks, geese, koel pheasants, guinea-flocks, partridges and doves. hedgehogs have been suspected as reservoirs of the disease. The disease is also suspected to cause conjunctivitis among laboratory workers and persons handling infected birds.

NECROTIC ENTERITIS (NE)

Necrotic enteritis (NE) is an acute Clostridium infection characterized by severe necrosis of intestinal mucosa. The disease begins suddenly, with a sharp increase in death rate. A strong dehydration is observed. The skin is stuck on or adhered to body musculature and is hardly removed.

9. TREATMENT AND PREVENTION

At present there is no effective treatment of any value. Proper housing and general good care are indicated in an effort to shorten the duration and severity of the infection.

An early recognition of the disease and application of struck sanitary measures are of great value in the control of the disease. Some important measures for its prevention are ; slaughtering of all apparently ailing birds, segregating of in - contact in group of 10 to 15 each; removal of all infective materials such as droppings, residues of poultry cleanliness ; and provision of separate attendants for each group of birds.

The poultry farm should be at a distance from place of traffic. All newly purchased birds should be kept in segregation from not less than 10 days before taking them into the farm. The poultry runs should be ploughed from time to time and lime applied thereon as a general disinfectant. As far as possible the pens and runs should be made inaccessible to free - flying birds by providing a barrier of wire - netting.

9.1 CONTROL

Control of Ranikhet diseases can be effect with judicious application of sanitary and vaccination measures. The possibility of entry and spread of infection is considerably reduced through the maintenance of flock on deep little system and stopping all unauthorized entries, even of human beings, into the battery brooders. Disposal of fowl carcasses by burning or deep brutal to reduce the scope of carrion-eating birds like crows, kites and vultures perching near fowl pens or poultry farms helps to resume the hazards of this infection. Two types of vaccines are available in India, one for the adult birds an another for younger birds or body chicks. The virus strain for Ranikeht disease vaccine used for adult birds age over weeks was evolved at the Indian veterinary Research Institute. The vaccine consists of freeze - dried virus grown in chick embryos. Vaccination of birds 6 weeks old and above confers immunity for 1 to 3 years. Care should be taken to vaccinate bird's not carrying heavy coccidian infection. Birds with heavy worm infection or coccidiosis are not protected even with a good vaccine. There are sometimes complications side reactions following vaccination. There are sometimes complications side reactions following vaccination with 'Mukteswar' strain of Ranikhet disease vaccine. These consist on inco-ordination of limbs and sometimes paralysis in 1 to 3 per cent to the vaccinated birds. The reactions may become more acute if the birds are affected with roundworms, coccidiosis or are weak on account of malnutrition. Thus, it is advisable to store feed ingredients or ration in proper places to avoid its contamination by microorganisms. In addition, preference shall be given to fresh feed rather than stale or feed stored for longer durations. Inappropriate and prolonged storage conditions would encourage microorganism to contaminate feed rendering them unsafe for sue and better performance.

9.2 VACCINATION PROGRAMME FOR LAYER TYPE CHICKEN

Age	Disease	Vaccine	Route
1 day	Marek's	HVT vaccine	I/M

5-7 days	RD	Lasota/F	Occulonasal
10-14 days	IBD	IBD Live	Drinking water
24-28 days	IBD	IBD Live	Drinking water
8th week	RD	R2B/RDVK	S/C
16-18 week	RD	Killed/Live	S/C

(Source: www.vuatkerala.org)

10. CONCLUSION:

From the above study, we concluded that the poultry farmers had severe economic fluctuations due to climatic factor along with other constraints. If the poultry farmers adopt suggested measures in production, they may get relief from the economic fluctuations. This paper has further scope for doing research on preventive disease management, production management in order to avoid economic fluctuations of poultry farmers.

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REPUTATION RISK MANAGEMENT IN THE INTERNATIONAL OIL COMPANIES

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ABSTRACT

The oil and gas companies face a number of risks but the most critical one is the risk of corporate reputation. Corporate reputation can be a key contributor to an organization's success but can also lead to an organization's failure. Evidence has linked corporate reputation and reputation risk management (RRM) with many intangible and tangible assets, with scandals from media activists and public opinions. This study introduces and explains the reasons why International Oil Companies' (IOCs) Reputation Risk Management (RRM) has led to the oil's sector reputation damage. It also presents a critical review of policy issues and approaches for managing reputation risk in the petroleum industry. The conclusion of the study is that RRM and corporate reputation influence IOCs' communication with the public, contributes to enhancement of international law when associated with transparency, but, sometimes make IOCs vulnerable to external threats. The study proposes that corporate social responsibility (CSR) can enhance corporate reputation risk management approaches, but, is not enough unless development of the appropriate culture through implementation of effective risk management policies takes place.

Keywords: Corporate reputation, Reputation Risk Management (RRM), International Oil Companies (IOC), Corporate Social Responsibility (CSR).

REPUTATION RISK MANAGEMENT IN THE INTERNATIONAL OIL COMPANIES

1. INTRODUCTION

The petroleum industry is one of the largest, most complex and important global industries in the world as it touches every part of the human life with products such as gasoline, gasoil, asphalt, lubricants and

numerous of petrochemicals. Unlike the financial institutions and other service organisations, the activities involved in producing these products are difficult, expensive and risky. These factors expose the petroleum industry to a large pool of risks including natural, engineering, management and economic. All these risks either individually or collectively affect the performance and reputation of the petroleum industry in case of an occurrence (Yanting and Xing, 2011; Inkpen and Moffett, 2011). The importance of risk analysis in the petroleum industry over the past years has received much attention. Yanting, and Xing, (2011) investigated risk management of petroleum operations and found that, the top priority for petroleum enterprises is the establishment of risk management system and control mechanisms in accordance with features of petroleum operations to meet the needs of modern management. Andersen and Mostue, (2012) also studied the risk analysis and risk management approaches applied to the petroleum industry and their applicability to Integrated Operations (IO) concepts. Using the Norwegian oil and gas industry as the basis, they theorized that, traditional risk analysis and management approaches in the oil and gas industry are challenged and thus require a more modern and concerted approaches to analysing and managing risk. The role of reputation in the petroleum industry cannot be over emphasized. In past decades, risk controls were directed toward capital losses arising from credit risk, trading and market operations. But today, due to the complex nature of the business environment, the profound risk which must be identified, mitigated, controlled and monitored is reputation risk (Holmes, 2004 p.g 14; Abelman et al 2006). The reputation of any company in the world of business is both its most important asset as well as the asset that is most difficult to recover once it is lost. A good reputation strengthens a company's market position and increases shareholder value; hence generate great reward for the company (Brown, 2007; Scandizzo, 2011). Reputation risk management in the petroleum industry requires a well-coordinated framework and a more comprehensive approach as compared to financial institutions (Andersen and Mostue, 2012). This is because management decisions regarding policy issues and other stakeholder's expectations are directly linked to the performance of the industry (Kavaq Business Intelligence, 2005). This situation makes the management of reputation risk more challenging and unrestricted to only compliance with rules and control. Therefore it depends on strong ethical culture with the application of sound judgement within a risk-conscious and structured environment (Verhezen, 2006).

2. MANAGEMENT OF REPUTATION RISK IN THE PETROLEUM INDUSTRY

The nature of operations in the petroleum industry is more integrated making it very difficult for traditional risk analysis and management approaches to address the challenges affecting the image of companies within the industry. Since its inception, the petroleum industry has faced various policy issues regarding mergers and acquisitions, corporate responsibility, corporate governance and leadership, regulatory compliance, workplace talent and culture, communication and other human and environmental related issues as its activities in one way or the other affect the socio-economic, political and the natural environment. Consequences emanating from these activities adversely affect the operations and image of the company and its partners, lives and property of employees as well as the natural environment (Inkpen and Moffett, 2011; Yergin D., 1991; Andersen and Mostue, 2012).

The management of reputation risk has always been a serious challenge to managers and decision makers. Whenever challenged with such a situation in financial institutions and other service companies, most of them take false comfort from the fact that they have a public relations department. This is because reputation risk management in such organisations is perceived to be synonymous to media management (Davies, 2002).

As theorized by Scandizzo, (2011), these organisations assume that customers and members of the general public form their perceptions based on information from the media, regulators and auditors since they have limited knowledge concerning the inner workings of the organisation. Hence spend substantial amount of time on the media and financial reports neglecting their own behaviour and responsibility to their customers and the society at large.

Reputation risk management looks different in the petroleum industry due to the integrated nature of operations in the industry (Inkpen, and Mofett, 2011; p.g 20; Andersen, and Mostue 2012; Zheng 2010). According to the Integrated Operations Centre (IOC), cited by Andersen, and Mostue, (2012), the integrated operations involve *“the integration of people, work processes and technology to make smarter decisions and better execution. It is enabled by the use of ubiquitous real-time data, collaborative techniques and multiple expertises’ across disciplines, organisations and geographical locations”*. The integrated operations provide the opportunity for the industry to achieve better safety working conditions, extended operational life, reduced cost, higher production and recovery rates upon which reputation is built.

Reputation risk management is directly tied to these achievements as they are the benefits emanating from the policy issues such as corporate responsibility, corporate governance and leadership, regulatory compliance, workplace talent, safety and culture, and communication considered by management. However, managers face various challenges in the executions of these policy issues. The costs involve in meeting corporate responsibility, ensuring workplace talent and safety and delivering effective communication are always high and as such hinder the fulfilment of these responsibilities. The petroleum industry is also subjected to special regulations and supervision by state agencies and environmentally-concerned organisations. Proposed regulations in most cases are counterproductive and hence, lead management into the adoption of unethical behaviours which increases the risk portfolio of the company. All these impact on the operations and have long-run effect on the reputation of the petroleum industry. Even though their operations are integrated, few of them have risk reduction methodologies in place across all areas of potential risk. Thus, reputation risk remains at stake. It is important to note that even organisations with good reputation such as Exxon Mobil and BP had suffered serious and to some extent irreparable damage from their operations (Ernst and Young, 2010; Aven, and Renn 2012; Abelman et al, 2006). For instance, the Gulf of Mexico oil spill which occurred in 2010 has landed the reputation of BP into disrepute. This incident left the life of cherished marine animals such as the sea turtles and dolphin in danger. BP is still standing trial in the US court, which could lead the company to huge fine despite its agreement in 2012 to pay £2.9 billion as criminal charges (New England Aquarium, 2013). Such a case and the likes within the petroleum industry make reputation risk management more important. Therefore, when taking policy decisions regarding regulatory compliance, financial performance, employee working conditions and environmental considerations, managers

together with the board of directors consider the impact they will have on the reputation of the company and as such develop a more comprehensive and coordinated approach towards managing them (Aven, and Renn, 2012; Davies, 2002; Rayner, 2010).

Effective reputation risk management in the petroleum industry depends upon identifying and controlling all the risk at each point of operations (Lam, 2003; Yanting and Xing, 2011; Aven and Renn, 2012). Reputation is best managed through strong corporate governance and leadership, ensuring regulatory compliance, meeting stakeholder's expectations and fulfilling corporate responsibilities. Also, preserving a strong reputation revolves around effective communication and establishment of strong and solid relationships between the organisation and stakeholders.

3. CORPORATE REPUTATION AND INTERNATIONAL OIL COMPANIES (IOCs)

The public and non-governmental organizations blame the International Oil Companies (IOCs) and governments for environmental challenges, poverty and corruption. This rapidly rising social and environmental pressure for the oil companies indicate that solutions have to be provided addressing technological as well as social needs. The social issue is focused on corporate reputation and the management of the components of reputation risk. The anticipation and management of the risk components such as the stakeholder and media can help mitigate the degradation of natural resources and deterioration of the environment (Jenny, 2003). Corporate reputation and RRM occur within and outside an organization (Zhang, 2009; Ladipo and Rahim, 2013). Their influence on the IOCs may be of a positive or negative impact due to the hidden risk element an oil company faces (Nathalie and Serban, 2012). Risk management often is linked with a company's financial performance, workers performance and public preference (Martin, 2009). However, corporate reputation risk might be more important. In order corporate reputation and RRM to benefit the oil sector, issues such as corporate social responsibilities, stakeholder management and regulatory compliance should be involved, otherwise, managing wrongly, this may lead to a crisis which can damage an organization's image, leading to disconnection of consumers (Hale *et al.*, 2005) and resulting to business relation disruption (O'Rourke, 2001). A negative corporate reputation yields negative cognitive association which in turn creates a problematic image for an organization. For instance, the Brent Spar crisis led to a serious talk about Shell that clearly harmed the company's image (Heugens and Zyglidopoulos, 2007). Research (Dowling, 2004; Nathalie and Serban, 2012) has linked corporate reputation and RRM with various intangible assets, tangible assets, scandals from media and activists over-dramatization and public opinion.

4. CORPORATE REPUTATION AND REPUTATION RISK MANAGEMENT (RRM) ON INTERNATIONAL OIL COMPANIES (IOCs)

Corporate reputation, due to its complexity, has made researchers unable to describe the total concept. A summarized definition that captures the measurement and value of the concept is "*a collective examination of a company's pleasant appearance to a precise group of stakeholders relative to a reference group of companies with which the company competes for resources*" (Michael and Timothy, 2012, p.7). The term evolves into a strategic and intangible corporate asset and reflects corporate

reputation as a firm's strategic behaviour to make plans and establish functions for growth, survival and profitability (Ladipo and Rahim, 2013). A good corporate reputation is inevitably linked with an effective RRM approach. According to Marconi (2002), RRM is the assembly of processes designed to protect and promote a company's reputation. RRM helps to shape an effective corporate image (Marconi, 2002). In cases where IOCs are faced with a problematic corporate image, a risk of corporate crisis may occur. Based on this perspective, frameworks to escape harmful consequences of crisis have been built around appropriate reputation context, hence known as Reputation Risk Management (RRM) (Koronis and Ponis, 2012). These two components may influence the IOCs in a number of ways as illustrated in the next section. RRM is a support for corporate governance, competent management, organization profitability and media management in the oil industry. It accounts for management of intangible assets such as corporate reputation, employees' reputation, culture, strategic decision making and license to operate. A good RRM is considered as an alternative for poor information about product and practice. This statement is the reason why most practitioners in the oil sector may suffer the negative influence of RRM. However, the positive effect outweighs the negative influence (Marion, 2004).

4.1 Reputation Risk Management in International Oil Companies (IOCs)

The importance of corporate reputation and RRM for IOCs is to effectively manage customers, investors, employees, suppliers and other rational and emotional elements of the oil sector. This point is underscored by the CEOs of an oil company who said that; *'Companies that act with principles of good corporate citizenship may reap a reputational dividend in markets where consumers are increasingly socially aware among a growing number of investors and in the employment market'* (Mitchell, 2000, p 1). IOCs' reports and websites have also revealed that reputation is a major issue and must be managed effectively (Shell, 2013; Suncor 2013). An effective management with strong corporate reputation in the oil sector can influence an outperformance of an IOC's competitor/s by over 100 percent (Metrica, 2011). This has led to the foundation by which IOCs have focused on managing environmental and social responsibilities to improve their RRM approach. The outperformance advantage arises when RRM is combined with crisis management stakeholder and media management as its major components (Jenny, 2003; Jean and Jenny, 2009). Media and stakeholder management are crucial assets for oil companies. They have become more important in this era of global business due to transparency and communication via the internet. This is because non-governmental organizations, environmental activists and the public have become well informed and connected to social-medias. This has caused a detrimental effect on oil companies who do not effectively manage their corporate reputation. An example illustrated by Jenny (2003, p37) in her book shows that campaigners have labelled ExxonMobil as an environmental enemy in the US-based Campaign ExxonMobil. The company stands in total contrast with its competitors BP and Shell who were advantageous due to their effective management of stakeholders by backing the Kyoto Protocol by investing in renewables (Jenny, 2003).

Corporate reputation and RRM is a competitive advantage for the IOCs as it serves as a 'reservoir of good will' often called *reputational equity* or *reputational capital* in events of crisis (Mahon, 2002; Varadarajan *et al.*, 2006). However, RRM can only become effective when corporate reputation is associated with trust, transparency, credibility and communication (Gillies, 2010). The reputation of a company depends on

58% of public's perception about a firm and only 42% depends on perception of the firm's products and services (Reputation Institute, 2011). Therefore, an incident like Shell's plan to dump the Brent Spar in the bottom of the sea (in 1995) will still hold a negative image for the companies especially in the case of environmental disasters news (Meijer and Kleinnijenhuis, 2006). The IOCs have understood and acknowledged RRM and corporate reputation as a competitive advantage and this has influenced them to manage three major components: stakeholders, corporate social responsibilities and international regulations. However, mismanagement of these components may limit their functioning.

4.2 International Oil Companies (IOCs) and Stakeholders

IOCs have strengthened their relationship with stakeholders through engagement with external stakeholders and also with government bodies as they know that stakeholders influence their reputation status. Stakeholders' engagement is a prerequisite for IOCs as the level of systematic and transparent approach of dealing with stakeholders has been improved nowadays. Shell indicates this fact by using its Annual Sustainability Report and its websites (Shell, 2013). ExxonMobil uses a similar approach to show dedication to stakeholders using corporate citizenship reports to strengthen its corporate governance (Exxon, 2008). The oil companies also try to win a good reputation in the eyes of academics through scholarships and grants. For example, Shell Oil shows commitment to environment, education, and the community through its participation in the 2013 Texas regional competitions (Tamutimes, 2013). Bad reputation is contagious thus too much involvement with corrupted stakeholders or governments may damage the reputation of oil companies.

4.3 Corporate Social Responsibility (CSR)

Since the public blames the oil companies for most political vices, they expect the sector more than any other sector to do more than just to comply with laws (Gillies 2010; Spence, 2011). Hence, the public demands CSRs which includes transparency, charities, environmental protection where the companies' business contribute to human and habitant security (Spence 2011). The limit to CSR is illustrated by Henry Ford, "*you can't build a reputation on what you are going to do*". Getting CSR right is seen as a good business practice which can promote competitive advantage, growth and high productivity however, getting it wrong will damage the reputation of the perpetrator, and the whole sector (Jenny, 2003).

4.4 Regulatory Compliance

RRM influences IOCs to embrace international legal regulations (like the Extractive Industries Transparency Initiative and Extractive Industries Review) and to ensure been regulatory compliant. The Extractive Industries Transparency Initiative (EITI) promotes transparency as an international norm. It supports governance in countries rich with resources by verifying and publishing IOCs payments and government's oil, gas and mining revenues (EITI, 2004). The World Bank promotes good governance through the Extractive Industries Review (EIR) which is believed that protects against the resource curse (World Bank 2004a).

The limitation to this particular approach is that the importance of the systems is overstated as a policy

tool by the IOCs. For instance, the EITI has failed to secure commitments in some countries like Trinidad & Tobago, and, Angola. Pegg (2006) also argued that EIR has failed projects in extractive industries like the Chad Cameroon pipeline project. Furthermore, the regulatory compliance point should not be exaggerated to say that environmental damage, human rights violations, and oil-driven corruption has been eliminated (Pegg, 2006). The limitations of the positive influences make room for the negative impact of RRM on corporate reputation for IOCs.

4.5 Application of Reputation Risk Management (RRM) : the other side of the coin

The previous section highlighted some of the benefits of corporate reputation and RRM which is mainly due to transparency and communication factors. These factors have strengthened external stakeholder's abilities to spot and expose inaccurate doings of IOCs. The greatest of the risks to reputation to the IOCs is the environmental and biodiversity risk and this is because it occurs in public, where almost every handy gadget (phones and iPods) is a camera. The internet has also made it very easy for the media and the public to access information through YouTube and other websites. The negative influence arises as a result of how the IOCs use their RRM and corporate reputation.

IOCs use their RRM for diverse motives either positive or negative. Their motives illuminate agendas derived from diverse elements, ranging from public cost issues (Spence, 2011), internal political state of affairs to different international ambitions (Gillies, 2010). In the case of Elf (now Total), a political motive and a pillar of corruption was seen in its association with several African governments in 1994 (Shaxson, 2007). Some IOCs use reputation to be compliant with international law (Guzman, 2002). Because it can create status and behaviours used to access parts and services of the society and increase bargaining power for investment in norm valued communities (Risse *et al.*, 1999). Gillies (2010) also explained that IOCs when are insecure about their reputation status they tend to embrace international norms. He also indicated that new norms and transparency improves reputation and are powerful mechanisms of *power production* (Gillies, 2010). This can form a background on which most international oil companies (IOCs) can use reputation as a shield when faced with self-perpetrated crisis as happened in the Niger Delta Shell case; Shell settled the defendant families involved with \$15.5 million before court trial in 2009 claiming that it was a reconciliatory process with Nigeria (Spence, 2011). This makes it clear that some IOCs may embrace public relation activities like CSR because they believe that it is wrong to leave a bequest of social displacement through toxic contamination and poverty. The point does not suggest that Shell used an effective RRM to cover their tracks, it merely suggests that if Shell did, we just never know.

Events like that stated above may pique stakeholder's ability to interpret an IOC's attempt to manipulate its reputation. IOCs lack of information on the influence of stakeholders' perception on companies' act, may lead to negative influence of RRM and corporate reputation (Mahon, 2002).

4.6 The influence of stakeholders' perception on reputation risk management (RRM)

Corporate reputation's is difficult to manage because it is based on stakeholders' assessments, impressions, and perceptions which fluctuate easily within a short period of time. Based on this fact, while operational and financial damages of a firm can be contained, the public impression and perception cannot (Koronis and Ponis, 2012). Hence, reputation must be managed as an asset class referred to as "*social approval*

asset” (Michael and Timothy, 2012).

While a good corporate reputation and RRM has its positive side, it can also have a negative side on IOCs such as Shell, ExxonMobil, BP. Bartley and Child (2007) demonstrate how positive management traits that favour image, performance and openness can ironically make IOCs possible targets to activists since they are easily vulnerable to ‘shaming’ (Bartley and Child, 2007, p.6). This is seen in Niger-Delta Royal-Dutch Shell case in connection with the Nigerian activist Ken Saro-Wiwa who illustrated the idea in his statement: “*Shell is always there in the background even if it denies all participation. I believe, and not without reason, that the company’s ready cash is always at play, goading officials to illegal, covert, and overt actions*” (as quoted from Okonta and Douglas 2003, p.128). This caused a negative impact on Shell’s reputation as international non-governmental organizations and journalists forced Shell to undergo a large-scale campaign in public as a response strategy (Spence 2011; Gillies, 2010). Based on the Shell case, one can suggest that IOCs can anticipate that openness or transparency resulting from the corporate approach towards RRM, may lead to vulnerabilities, such as to bad press; to activists’ reactions, and to attraction of legal investigations.

5. THE ROLE OF CORPORATE SOCIAL RESPONSIBILITY (CSR)

A question that is raised is the following: does corporate social responsibility (CSR) benefit the influence of corporate reputation and reputation risk management (RRM) on IOCs? Some scholars (Zhang 2009; Alniacik *et al.*, 2011) have argued that CSR is the major and effective corporate RRM approach in oil or other industries especially for stakeholder management. However, according to Nathalie and Serban (2012), CSR can help but it is not essential, and, sometimes may worsen crisis scenarios. Their survey illustrates that CSR is not a key determinant of RRM. They also add that some respondents in their research claimed there was no direct connection between CSR and corporate reputation (Nathalie and Serban, 2012). The case of BP’s oil spill in the Gulf of Mexico mirrors the effect above. Despite the investment of billions in CSR, the BP stock fell by 52% in 50 days due to the crisis (Jenny, 2003). An ex BP chief executive also uses his silver words to earn social license to operate by having a good reputation through CSR

‘Our global business nature also drives the need to be involved in the societies in which we operate. Not out of altruism, but out of enlightened self-interest, due to our believe that if big companies are not seen to be making constructive social investments their license to operate will in the end be limited. And if the ability to operate is restricted, then your performance is limited’ (John Browne, former executive, BP).

This strategic reputation risk management approach is quite effective for companies when applied, but depends on ‘when’ and ‘how’ is applied, especially in crisis situations. CSR in crisis is not as efficient as that used before crisis; for example, in the Campaign ExxonMobil case, the management tried to contain their reputation crisis by donating \$100 million to a Stanford University project to mitigate global warming but this was dismissed and regarded as a delaying tactic by Greenpeace (Rob cited from Jenny, 2003). Kaplan and Mikes (2011) explained that managing risk is not easy and can sometimes be demanding. Organizations can pay now to measure, mitigate, manage and identify their risks, or, can pay later (Nathalie and Serban, 2012). This is seen in BP and other institutions that failed in 2007 and 2008 and learned the high cost of paying later rather than now (Kaplan and Mike, 2011).

6. CONCLUSION

The petroleum industry is one of the critical sectors in the global economy. The nature of operations in the industry is more integrated making it very difficult for traditional risk analysis and management approaches to address the challenges affecting the image of companies within the industry. Most organisations are much informed about their tangible assets and as such develop strategies towards managing them. However, reputation as an intangible asset in most cases is usually given less attention as it is difficult to identify and manage. There is enough evidence to support the argument that any company whose reputation suffers a blow will see it translated into real and painful consequences (Rayner, 2011; Scandizzo, 2011; Brown 2007; Davies 2002).

The study has clearly demonstrated that RRM and corporate reputation influence the IOCs in a number of ways such as to shape the external stakeholders' perception in the way in which IOCs communicate with the public. It also maintains that RRM enhances international law when associated with transparency and other good practices however; the negative impact is that RRM may sometimes lead IOCs to be vulnerable to external threats. The oil and gas industry is technically complicated and the influence of corporate reputation and reputation management makes it socially and politically complex. Since IOCs tend to operate globally, they may get involved in situations where they have to deal with corrupted governments and other external factors in this process of operating in new environments, which may lead to negative effects for them in the short or long run. RRM and corporate reputation may lead to the success or failure of IOCs

6.1 Recommendations

Some recommendations to be attached to the IOCs management approaches to make them more effective could be:

v Create a good Corporate Reputation to Earn Social License

This involves the words of the mouth; that is, "say what you mean and mean what you say". A social license should be acquired from local communities and indigenous people (World Bank, 2004b) and not just by saying what makes you feel and look good in public. IOCs should reflect at past management strategies and develop policies to meet all stakeholders. The management tools to be used here may include Strengths, Weaknesses, Opportunities and Threats analysis (SWOT analysis) and Politics, Economics, Social and Technological analysis (PEST analysis) (Nelson and Scoble, 2006). To summarize this point, the best way to obtain a social license is for IOCs to endure a positive corporate reputation (see Appendix 2).

v Have an Organizational Culture through effective Reputation Risk Management **Operations of IOCs** should encourage honesty and openness throughout all areas of operations which must include value for employees, trust, freedom to act and expression of viewpoints. The culture must align with innovation, communication, criticism and a crisis management plan. The organization norm; integrity, responsibility and ethical behaviour should be shaped from the top down management hierarchy. Culture is important to shape reputation since it is an everyday process (Holmes, 2004).

In today's growing business environment, "*societal expectations of corporate behaviour*" is a major

challenge to management in their quest to fulfil their Corporate Social Responsibility (CSR). This “behaviour is alleged by a stakeholder to be expected by society or morally required and is therefore justifiably demanded of a business” (Whetten *et al.* 2002, p. 374). CSR is concept that is stakeholder-oriented and holds the view that, organizations exist within networks of stakeholders and face the potentially conflicting demands of these stakeholders. This therefore requires organisations to translate the demands of these stakeholders into their CSR objectives and policies (Lindgreen and Swaen, 2010). Also, it is these expectations that form the perceptions held by stakeholders regarding the activities of the organisation. This shows that, any organisation that is able to meet these expectations is likely to be in the good books of these stakeholders and hence build strong reputation for it. Based on this, the study recommends that, organisations should consider adopting CRS policies especially the petroleum industry as of part their reputation risk management approach.

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RETAIL COMMERCE & BIG RETAIL CHAINS IN GREECE: THE CASE OF DIY (DO IT YOURSELF) SECTOR AND THE EXAMPLE OF “IKEA”

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Abstract

In the middle of the world wide crisis and the adverse effects of credit crunch to global growth, the sectors which have the ability to adapt to changes, to market and consumer needs are those that can survive and develop. An indicative sector is “Do It Yourself” (DIY). The aim of this study is to analyse the retail commerce in Greece the penetration of the big foreign retailers focusing on the sector of “Do It Yourself”(DIY). It aims to investigate the global enterprises of DIY household sector, the changes they have caused in the Greek market and in consumers’ behavior providing an outline for DIY’s future development. For the successful completion of the present study relevant literature is reviewed, secondary sources are consulted and a collection from interviews of professionals of DIY sector is used. A case study is presented and analyzed, in order to support the study’s findings and claims. The main conclusion of the study refer to that although the economic crisis in Greece has influenced the retail sector and consumers’ behavior, however, the DIY sector for home improvement is developing, mostly because of its competitive advantage of “good quality & low price” goods and its ability to adapt to the current market conditions compared to the local producers who strive to survive.

Key words: DIY (Do It Yourself), retail, consumer

1. INTRODUCTION

The penetration of foreign retail enterprises in the Greek market and the collaborations which have been made, have caused great changes in the structure of retail commerce. Retail is characterized by the presence of big centralized enterprises, which lead to the form of oligopolistic markets, following the global trends.

Due to the economic recession and the global credit crunch, people are generally reluctant to built or buy a new house and are instead focused on improving their home and living conditions resulting in DIY house ware and hardware growth. Despite the decline in construction activity, the DIY market is gaining market share in countries that are still under development. The sector of DIY has changed a lot in Greece

and consumers have turned to alternative ways of purchasing. The traditional family-run business and the local specialists have lost their power, whereas big foreign chains have gained the market. These foreign retailers with the concept of ‘Low Price’ being their main competitive advantage became a trend, especially because of their low-cost products. The current economic crisis which affected the global market and especially Europe has influenced consumer behavior and companies’ strategies. New products and new commercial policies have been followed by those enterprises that penetrated in global markets, in order to survive and develop. Consumers have turned to more “value for money” products and solutions, especially regarding their home improvement and consequently, companies try to adapt their products and cover consumers’ needs with lower cost solutions.

The present study focuses on the foreign multinational enterprises in Greece, their influence on the market and the changes that they have brought in the DIY household sector and in consumer’s behaviour. Through the case of “IKEA” the expansion and the success of these retailers is presented. IKEA is a characteristic big DIY retail enterprise which has influenced the global and national markets.

2. RETAIL & MAIN CHARACTERISTICS

2.1. “Retail globalization” and “multinational” enterprises

During the last half of the twentieth century, many barriers to international trade fell and a wave of firms began pursuing global strategies to gain a competitive advantage. However, some industries benefit more from globalization than do others, and some nations have a comparative advantage over other nations in certain industries (Balafoutis G, 2011). The Retail & Consumer industry is among off the sectors that are most affected by globalisation, where multinational companies expand their network and increase the number of their subsidiaries (QuickMBA.com, 2010). Retailing is considered to be a global industry. With a greater emphasis being placed on private-label merchandise, retailers are working with manufacturers located throughout the world to acquire merchandise. (Levy M. & Weitz B., 2009). Some retailers invest globally in order to take advantage on to fast-growing consumer markets, especially when their home markets are stagnant – like Germany and Japan. Retailers expand globally in order to leverage their existing assets (Deloitte Touche Tohmachu Limited, 2011).The lessons from global retailing and the examples of global retailers, with the common used term “multinational firms” reveal that expansion far from the home market to international ones is a complicated and complex procedure (Tatoglu E, Demirbag M. & Kaplan G., 2003).

The best global retailers spend substantial resources and time in *learning about the local market*. This entails understanding supply chains, regulation, sources of merchandise, and, most importantly, consumer tastes and habits. The latter is the most challenging. Understanding a foreign culture is enormously difficult under the best of circumstances. (Hofstede F., Wedel M. & Steenkamp M., 2002). A *motivated workforce* is a key factor for success not only in multinational companies, but in all retail firms. Motivation is important because of its significance as a determinant of performance and its intangible nature (Mishra, Sita, Gupta & Bindu, 2009).. Bent and Freathy (1997) mentioned that a key to organization's competitive performance has been the successful motivation of staff (Bent, R. & Freathy,

P., 1997). In order for a multinational company to succeed, *developing local relationships* is crucial. Also, a global retailer has to be *prepared to make big mistakes*, to learn and change-adapt. And finally, retailers have to be prepared to *invest on a large scale*. To achieve rapid growth, successful retailers will be wise to seek out new territories (Deloitte Touche Tohmatsu Limited, 2011). Central and South America with Brazil and Argentina, Africa, Asia, India, Eastern Europe and Russia, are some of the new emerging markets with great prospects of growth. These are the new destinations where global retailers are now turning their interest (A.T. Kearney Global Retail Development Index 2011).

2.2. Retail sector in Greece

In Greece, retail commerce has changed a lot, especially within the last ten years (Skordili S., 2004). The penetration of foreign retail enterprises in the Greek market and the collaborations which have been made, the institutional changes regarding the operation of domestic retail and the expansion of big domestic chains have caused great changes in the structure of retail commerce. The penetration of the multinational giant Carrefour, in the field of super-markets and Ikea in the home improvement were of the most significant developments, followed by other global retailers, such as Saturn, Media Mark & Fnac (electronic-multimedia field), Zara and Pull & Bear (apparel field) are some of the most indicative ones. (Retail business, 2011). The traditional pattern of the local retailer who offered a narrow range of items has changed to an area where consumers have at their disposal a great variety of goods and solutions (Retail business, 2011). As a consequence, consumer's behavior has also followed the above changes and the creation of a new generation of "Western consumer culture" abandoning the traditional purchasing methods was inevitable. Consumers today derive value from their purchases and the new retailing formats provide them with a total experience. (Teller C., & Reutterer T., 2008).

Greek commerce has been influenced by many market changes and new classifications in the structure of employment, indicating the changes in the structure of the Greek production model. Low entrepreneurship and high rates of owned businesses, where usually the owners are responsible for all the operating things without extra employees were soon abandoned for salaried employment. Employees' rights are more protected, working hours, wages, working environment, medical and private insurance are among off the high priorities of all the human resources departments of big retail chains nowadays (Aranitou V. & Sagias I., 2011).

3. RETAIL & THE DIY SECTOR

3.1. Do It Yourself (DIY) sector in Greece

Do it yourself (DIY) is a term used to describe building, modifying, or repairing of something without the aid of experts or professionals. The DIY market has a presence of more than 70 years worldwide and with a remarkable performance in Europe and America. During the years the market has changed significantly following the trends of global retail. In North America, Western and Centre Europe, as well as in all developed economies the DIY market has already a significant market share in retail trade and

the biggest retailers are involved in this sector. According to the latest Retail report of 2011 of Deloitte Group of Companies and also the official statistics centre for DIY, European Federation of DIY Manufacturers (FEDIYMA), the top ten global retailers in the world are big multinational enterprises who have expand their business internationally.

The DIY sector in Greece recorded a delayed development compared to other European countries, where the particular market is characterized by large market shares. The situation has changed the last decade, as the changes in Greek retail and consumer behaviour have been rapid and determinant for the future of the market.

The Greek consumer is likely little handyman. In a survey of the French Economic Committee for the Greek DIY market and retail in 2006, it appears that while three of four Greek undertake small DIY jobs (small repairs, painting, gardening) when it comes to more complex work, they appeal to the specialist (plumber, electrician etc.). This is mainly due to the low level of technical knowledge of Greek handyman. Finally, till 2005-6 there are no specialized newspapers, with few exceptions (Frager E, Kotsovassilis M, Takvorian M, & Pikri M, 2006).

The low cost of local labor was far, another obstacle to the development of crafts. As a measure, the local workforce has been replaced by foreign labor, cheaper, for which the household is using Greek for repairs and maintenance considered more complex.

The market for distributors is a tool for local business and small retail outlets in each district of Athens or Thessalonica, where "the handyman"-technicians can get the tools they need at a low price. "The handyman" team is either not supplied with sophisticated equipment for the investment required or the machinery is large relative to the number of uses it will perform (Frager E, Kotsovassilis M, Takvorian M, & Pikri M, 2006).

3.2. Greek DIY retailing and factors of development

The last decade was crucial for retail trade in Greece and for the DIY market which has been under great changes and growth. The development of the **construction** sector after 1995, because of the private and public investments, was a major factor in the improvement of DIY. The rise in **prices** was 15% in 2000, 17.6% in 2001 and 16.2% in 2002. In 2003 and 2004 the increase was more moderate (one digit). The year 2005 confirms the stabilizing high price level. The period 1995-2004 the real estate market has grown strongly. Demand for new homes has surged 134% increase across the country and 164% in the Athens area. All these combined with the **new infrastructure** (airports, bridge of Rio-Antirrio, highway works) had contributed to the rise of constructions and new dwellings (Frager E, Kotsovassilis M, Takvorian M, & Pikri M, 2006).

In the above period, Greek households expected higher prices for houses and as the borrowing **bank rates** were very competitive, there was an increase in new dwellings. Within the European Union, Greece had the highest percentage of households own their homes (79.6%) according to Eurostat official statistics. DIY is an area where professionals provide fragmented and disparate offers. The presence of big DIY retailers is limited. With regards to local stores, they try to diversify their offerings by extending a set of products found in the DIY sector. Their offer is aimed both at the general public and professionals. This is

due to the development of the construction market in 2004-5 that created some capital gains for companies wishing to invest in these new businesses to establish their presence and reputation. This development had later become a necessity by the gradual arrival of large international retailers, whose expertise was threatening to the entities that could adapt (Frager E, Kotsovassilis M, Takvorian M, & Pikri M, 2006).

All the above factors in combination with the retail globalization and the multinational's enterprises expansion resulted in the penetration of *big global DIY retailers* in the Greek market. This was a major change in the structure of DIY retailing in Greece, a change with important effects on the market and the consumer behavior. DIY retail trade in Greece has changed significantly the last decade both in its structure and retail forms following the global trends, while big multinational firms are now the ones that lead the market. (Euromonitor International, 2011). IKEA company is, perhaps, one of the world's most successful multinational retailing firms operating as a global organization based in its unique concept that the furniture is sold in kits that are assembled by the customer at home (Dimitriadis N., 2002). The typical IKEA customer is young, low to middle income family. Based on a recent research made by IKEA for its customers, the average age of the IKEA visitor is 42 and 60% of the visitors are women (Fourlis Holdings report, 2010).

3.3. IKEA: Key Reasons for IKEA's success

The **IKEA brand** is associated with simple, low cost, stylish products. Initially, IKEA did not customize its products to local markets, but kept to standardized products and operations worldwide. This *standardized strategy of internationalizing* minimized costs. This is one of the characteristics that make IKEA the leader amongst internationalising retailers. (Retail Business, 2009, 78; quoted from Olsson, 2011, p.12). IKEA developed a model for the business, where it was able to keep **costs low**. In order to maintain low cost, Ikea shoppers are half producers, and half consumers. In other words, they have to assemble the products themselves (Burt S., Johansson U., & Thelander A., 2008). The **“Do It Yourself”** concept has already started to become worldwide known and familiar to consumer. IKEA has **excellent international procurement**. Thirty buying offices were created to source from over 1,400 suppliers worldwide, IKEA negotiates prices that are between 20-40% lower than competitors for comparable goods. IKEA has excellent **supply chain management** and utilizes the **latest IT infrastructure, as well as, has a global network of distribution** centres, most of which are near container ports and major truck and rail routes. (Magonelly L., 2002). Over all IKEA is doing **differentiation and cost leadership**. *Differentiation*, because their products are different compared to the conventional ones already in the market. Anticipating the needs and wants of customers IKEA is successful in product design and ensuring ranges which are modern and of good quality (Burt S., Johansson U., & Thelander A., 2008). **Location** of the stores, **Services** to the customers, **Store's design** and facilities, children playrooms, restaurants are some of the areas that IKEA pays high attention. (IKEA corporate site, <http://www.ikea.com>).

And last but not less important, IKEA has a **social and environmental profile**. All IKEA campaigns have **“Environment”** and **“Sustainable Development”** as the major and basic message. This in

incorporated in all IKEA’s functions. **Charitable giving, social initiatives, donations for children, recycling** are some of the activities in which IKEA is highly involved. A detailed analysis is presented in the corporate site of IKEA.

4. METHODOLOGY & RESEARCH FINDINGS

4.1. Research Design

For the successful completion of this project, the research methodology chosen is based both on secondary sources and a case study. Due to the lack of academic research and studies concerning the greek reality, an empirical study was chosen investigating the case study of IKEA. The empirical study was made with the form of interviews and distributed questionnaires to top executives and employees of DIY sector and particularly from IKEA company investigating the current status of DIY sector in Greek market and the way multinational global retailers and specifically IKEA have changed household retailing trends in Greece.. The questionnaire attempts to answer the question, “What is the current status of Greek DIY household sector and how the multinational DIY retailers, like IKEA, have impacted the Greek market and the consumer”.

4.2. Description of the sample

There is a sample of seventy (70) participants for this empirical survey. Specifically, 15 interviews of top executives of IKEA took place, and, 55 questionnaires were answered that had been sent by email to other employees working in IKEA. The criterion of selection of the sample was participants to work in IKEA. The questionnaire was the same in both sub groups .

4.3. Questionnaires

The first question of the survey investigates what is the participants’ opinion on the current status of DIY market in the Greek retail sector. As it is illustrated in Figure 1, the DIY market is considered to be developing of the 59% of the participants and a percentage of 29% consider the market as mature. More specifically, according to the answers received, respondents support that Greek DIY market has being developing with quick rates the last years and has still potentials of development.

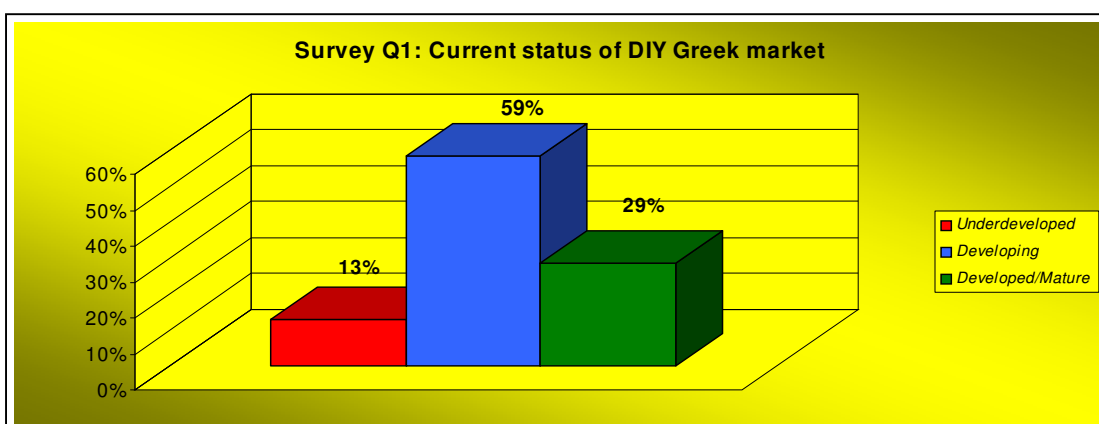


Figure 13: Status of DIY Greek market

Figure 1: Current status of DIY Greek market

The second question of the survey investigates how familiar are the Greek consumers with the DIY philosophy, concept and products. The replies (figure 2), indicate that 43% of Greek consumers are familiar with DIY and 36% that consumers are familiar at a smaller extent. Only a percentage of 7% of the participants believe that consumers are not aware of DIY concept.

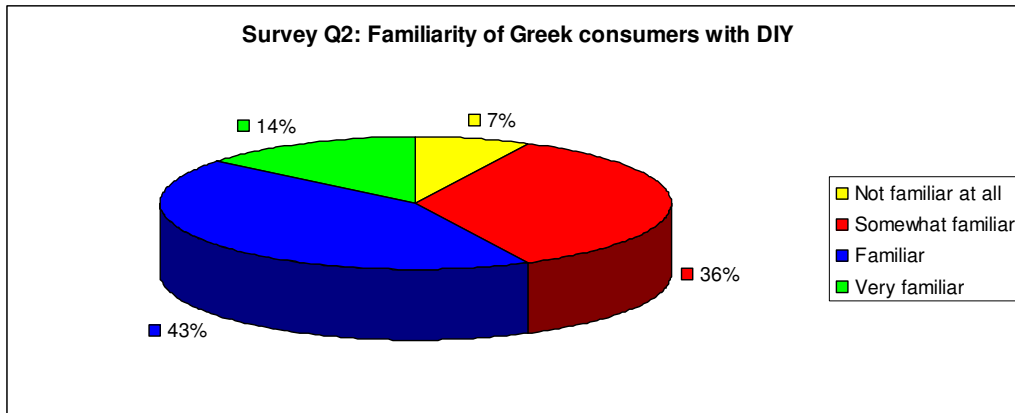


Figure 2: Familiarity of Greek consumers with DIY

The third question investigates whether DIY retail chains have contributed to the development of DIY sector in Greece. The 84% of the respondents believe that retail multinational firms of DIY have a great impact on the market and mostly on consumers and that they have contributed quite enough to DIY’s development. Only 16% of the participants believe that multinational DIY retailers had not contributed to DIY development. The results are illustrated in figure 3

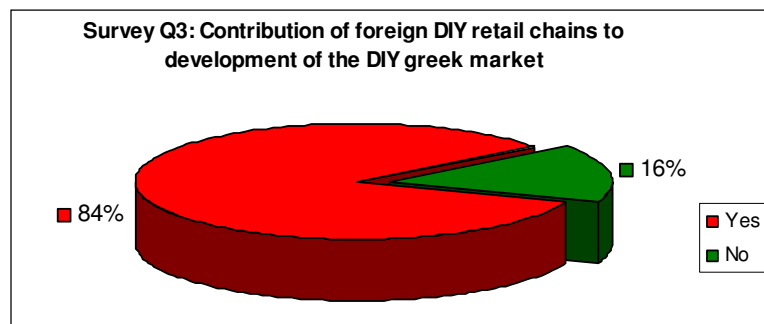


Figure 3: Contribution of foreign DIY chains to development of DIY Greek market

The fourth question concerns the extent at which the foreign DIY retailers, like IKEA, have affected the DIY market structure in Greece. The replies indicate that the multinational retailers which expanded in Greece have influenced the market at a great extent. The majority of the participants, in a percentage 36% believe that the DIY market is greatly affected by global retailers and also 29% believe that Greek market is affected very much. It is important to mention that none of the participants answered negatively to this question. The replies are represented in figure 4 and they indicate that global DIY retailers have changed the market structure and the expansion of DIY philosophy.

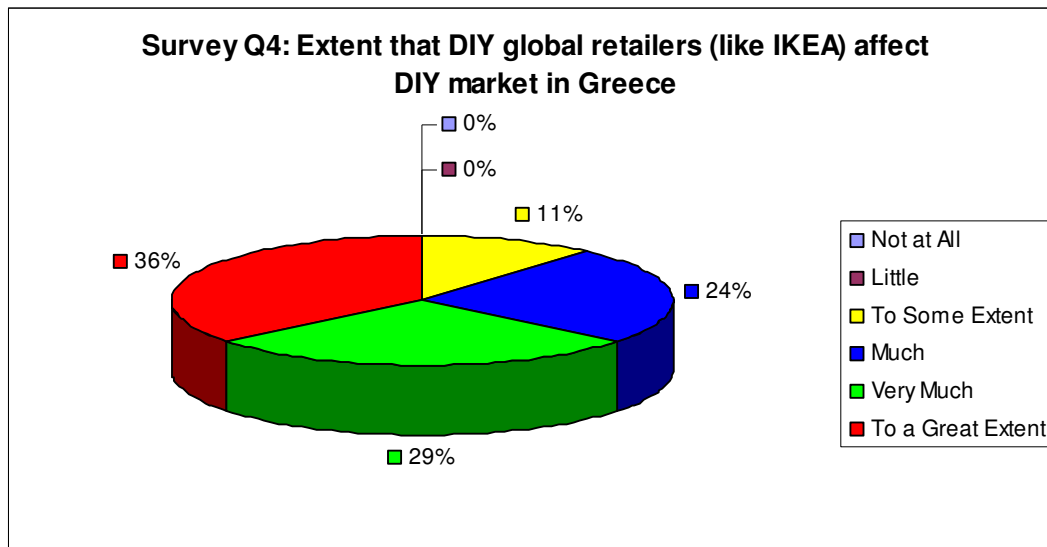


Figure 4: Extent of the impact of DIY global companies on DIY Greek market

The fifth question investigates where DIY multinational companies have influenced Greek consumers. DIY has affected consumers' perception of "*doing things by themselves*", 27% of participants, it has affected the *budget* they spend on home improvement projects at a percentage of 30% and it has changed their *decorative tastes* at a percentage of 19%. Participants also believe, DIY global retailers have changed competition in the Greek household sector and the *offered product ranges are better in depth, width, quality and prices*, at a percentage of 19%. Also, 17% of the participants believe that modern DIY chains in Greece have changed the *shopping experience* for consumers. Large DIY retailers, like IKEA, soon became a shopping destination. And last, a field which was indicated by 5% of the participants is the *closure of domestic retailers*. The results of this open question are summarized in figure 5.

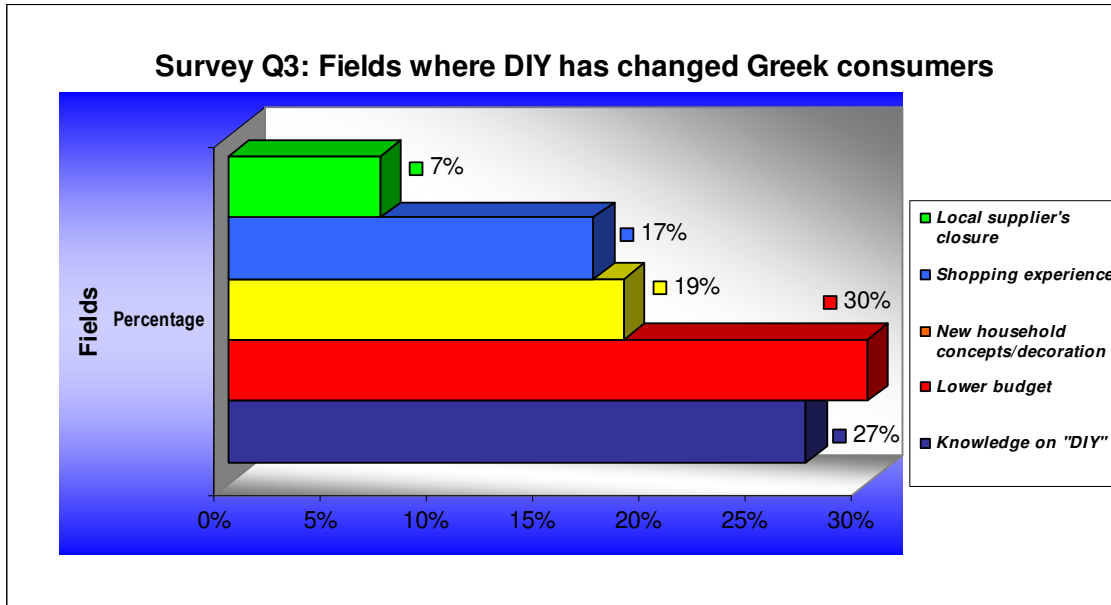


Figure 5: Fields where DIY has influenced Greek consumers and retail

The sixth question investigates whether DIY global retailers are a bad or good influence on consumers and Greek market. The majority 67% of the respondents have a positive view for DIY and only 7% are negative. Also, a 26% of the participants have a neutral aspect on DIY retailers influence both on consumers and in the DIY household sector. In figure 6 the results of this question are represented.

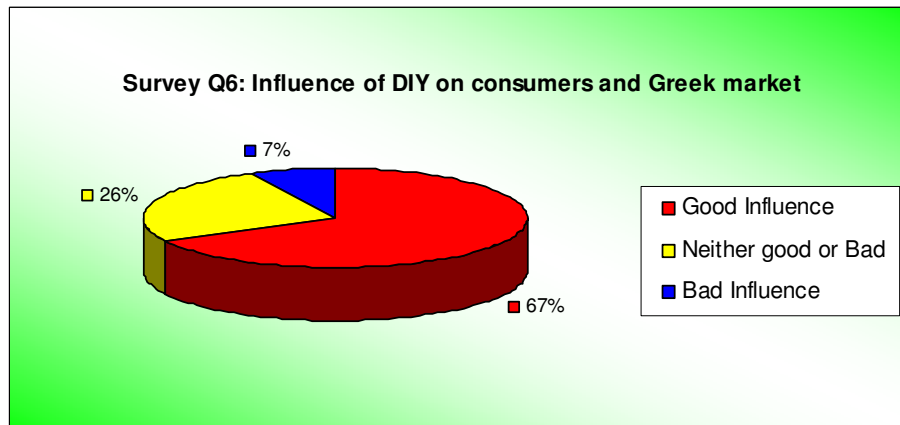


Figure 6: Level of influence of DIY on consumers and Greek market

At the top three criteria for the participants are reasonable and cheap prices when they buy (37,14%), followed by a percentage of 25,71% product quality and 15,71% for the product range. At a second level they value service (7,14%), ideas on household items, advice and friendly personnel (4,29%) and innovative and fashionable items (4,29%) as important criteria for visiting IKEA. It should be mentioned at this point that all the listed criteria are considered important by the interviewees and they ranked them according to the less important. Last, a point mentioned by the participants on the interview survey, is that accessibility is difficult compared to other traditional retailers who are usually in the centre of the cities

that IKEA operates and that this is an obstacle to visitors who do not have their own car or access to main means of transport. The results of this question are illustrated in figure 7.

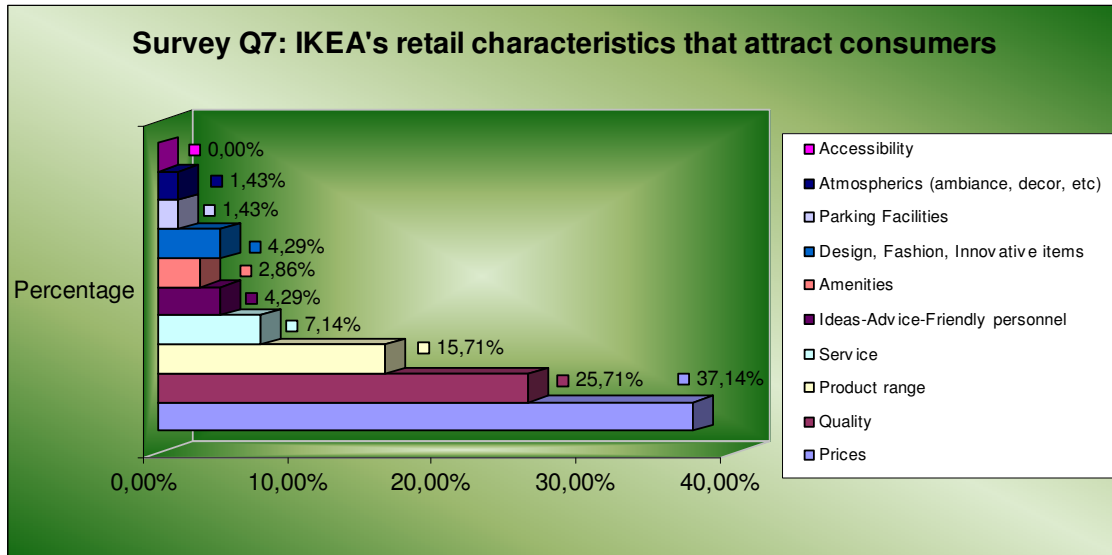


Figure 7: Retail characteristics of IKEA which attract consumers

The eighth question investigates employment in DIY retail chains. Wages and career opportunities are the criteria which differentiate foreign large retail chains, at a percentage of 29% and 26% accordingly. Another 16% of the participants consider training and getting expertise on ones profession as important criteria that differentiate human resources of a multinational well structured firm in comparison to a local less organized firm. The above can also be attributed to the fact that almost all participants are of average 34 years old holding managerial positions. .Figure 8 represents the results of the question 8.

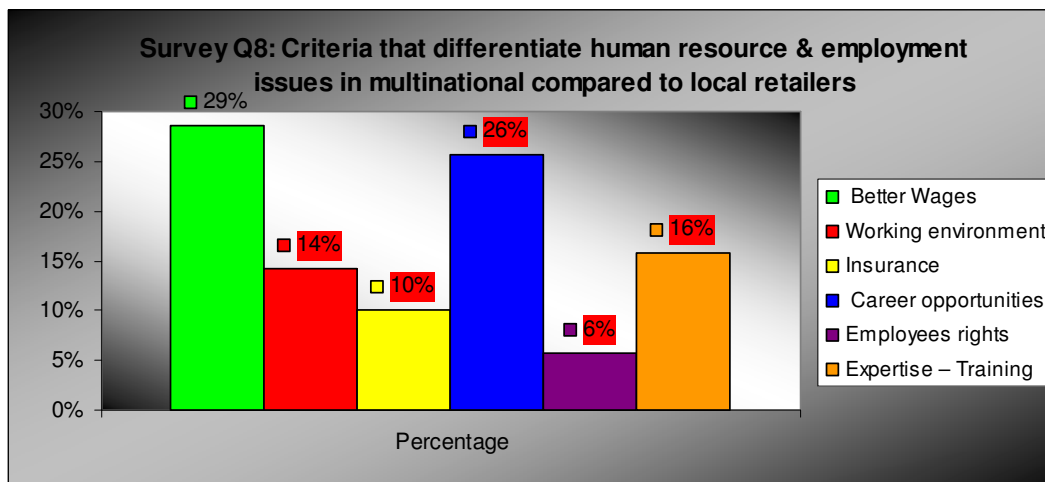


Figure 8: Criteria differentiating global retailers than local ones regarding human resources and employment

During the interview with the top executives, for the above question almost all the participants interviewed, a percentage of 86%, (thirteen of the fifteen interviews) they believe that unemployment was

reduced with the entrance of foreign retailers. It is important to refer that the majority of the executives are managing a big number of employees and they support that a multinational working environment influences both supply and demand for a high skilled and trained personnel. Usually, the big global retail chains have the financial and professional resources to educate and assess the quality of their staff.

In the ninth and tenth questions which are open questions in order to give to the participants the opportunity to express their opinion without constrains, the effect of the current economic crisis on DIY sector is investigated and the future of DIY retail sector and international firms. The replies of the executives lead to the result that the economic recession has already affected DIY sector, as retail in general faces a great drawback and it will take time for the market to regain its power. Companies seize their operation, global large enterprises departure from Greece and the market becomes more consolidated. Despite this, the majority believe that DIY retailers have now the opportunity to gain market share and customers, with offers which are “value for money”, qualitative and mainly reflect the current needs of Greek consumer who is threatened by the economic crisis.

5. DISCUSSION

The present study attempts to present and describe the retail DIY sector in the Greek market and the role the multinational retail chains have played both in the development of DIY in Greece and in the consumer’s behaviour. This is achieved by analyzing the findings from the present survey and the case of IKEA composed by a combination of interviews and distributed questionnaires through email, in conjunction with secondary sources on retail and DIY. Amongst other secondary sources, the findings of a research on the Greek consumer’s shopping behaviour, which was conducted by Boston Consulting Group on behalf of the French global DIY retailer Leroy Merlin (Roche C., Ducasse P., & Liao C., 2011) is used.

The present survey’s results produced interesting findings for the Greek retail DIY market and one of its major representatives, IKEA multinational company. It is essential to interpret consumers before the market, as “*Retail success is based on covering Consumers’ needs*” (Kotler, P. & Armstrong G., 2006). One of the basic results of the survey is that Greek consumers have a positive view for the foreign DIY retail chains and they believe that these retailers have a good influence on the market and them. However, some of the participants indicated that global retailers have caused problems on local ones and they have dominated on the market, which resulted in the closure of small enterprises. Greek consumers seem to be positive towards multinational’s firm’s expansion, but they are supporters of the local commerce and retailers as well. It could be mentioned at this point that as Greece tries to deal with a contracting economy and an unstable economic environment, local businesses are trying to gain an advantage over the competition by advertising their Greek credentials. This has an influence on consumers and their preferences that multinational retailers need to take under consideration (Versendaal H, 2012).

Based on the results of the present survey, Greek consumers believe that large DIY global retailers have influenced them mainly on their familiarity with the concept of “Do It Yourself” and on the way they use to improve and construct their houses. They believe that DIY market offers products of lower cost than

the traditional retailers of DIY. Particularly, IKEA has resulted in the decrease of the budget needed for home improvement. Low cost products in combination with good quality and wide product ranges are important for Greek consumers and IKEA's dominance in the household DIY sector has contributed to that. Similar to the above is the result regarding the basic retail characteristics consumers believe IKEA has compared to other DIY household retailers. The majority of our sample identified prices, product range and quality as the three main criteria for purchasing from IKEA. They also consider it as a "shopping experience" which offers a wide range of facilities and services. These are the main criteria they seek when making their purchases.

The above coincide with the results of the research conducted by Boston Consulting Group (BCG) on Greek consumer's behaviour (Roche C., Ducasse P., & Liao C., 2011). According to it, after the economic recession Greek consumers intend to reduce expenditure of non-essential items and they are more interested in offers and purchases from discount stores, where they can purchase goods on discount and private labels which are both cheaper and of good quality. According to BCG's survey, in the list of values which are most important for Greek consumers, the top five listed are: "Value for money" Purchases, Health, Friends, "My Home", Cheerfulness and Serenity. The firms which may adapt more efficiently and effectively to these values will gain market share. Some years ago, Greek consumer used to spend handsome amounts on luxury items, "image", well known brand names and trendy leisure activities. Things have changed after economic recession. Consumers in Greece not only pay higher prices on many products and services but also earn lower incomes. Their purchasing power is therefore less than the other Europeans. Hence, the impact of the economic recession on Greek consumers' consumption will be the same or even greater compared to the rest of EU countries (Mpaltas, G. 2008).

The responses received regarding the level of the DIY market in Greece characterize it as developing. Almost all the respondents believe that despite the economic crisis, it is now the opportunity to take advantage of this and remain in the market. It is a result that can be combined with the question on the future of DIY sector in Greece. The fact that a small percentage of the respondents selected the choice of "mature" serves as evidence that there are opportunities of growth for the particular market.

As far as the global DIY retails chains and their influence on the local DIY market, the responds were interesting. The majority of the participants mentioned that the multinational firms have changed the market structure at a great extent and imported in Greece new business techniques and store concepts. By reviewing the literature and secondary data, penetration of the big international retailers in Greece was delayed compared to the expansion in other European countries (Burt S., 2010). Though not asked, during the interviews procedure the respondents attributed the difficulty in establishing the concept of DIY in Greece to two basic factors; the first is that the market is more traditional and local specialists do not have sufficient "know how" of the business and the second one is that consumers tended to seek the local technician or professional who could do the job for them, even with higher cost (Frager E, Kotsovassilis M, Takvorian M, & Pikri M, 2006). Now this has changed and according to the turnover sales of the DIY global chains that the participants represented, Greek consumers today are more educated on DIY concept, on the offers they can get, their services and facilities. IKEA and other main DIY retailers have greatly contributed to this. Also many of the participants refer that lately "DIY" has gained wide recognition from

the market and the consumers, as there are many relative magazines available and TV shows with much advertising. DIY campaigns which are published in newspapers and on-line in the Internet make DIY familiar and popular and lastly, many Greek wholesale suppliers have included in their product ranges “DIY” products.

The participants in the research were also questioned regarding employment where all agreed that in every place that a big company or store is located there is a reduction in the unemployment rate. They also support that big multinational companies offer career opportunities, they have the knowledge to develop their workforce and raise the standards, the qualifications and skills of employees.

The results show that despite the decline in the retail sector due to the economic crisis of 2008-2011, the DIY market has the potentials to overcome difficulties and gain market share. The global DIY retail chains are facing problems, but all these can be overcome by following the markets trends and today consumer needs. Recommendations and developing suggestions are presented in the next section.

6. CONCLUSION

The purpose of the present research project was to present and describe the current status of DIY sector in the Greek retail commerce and the influence of big DIY global retailers in the market and the consumer behaviour. The methodology chosen for the completion of this research is based both on secondary sources and a case study. Secondary sources include amongst others, articles, magazines, journals, on line sources and statistical elements and a research on consumer’s behavior conducted by a consulting company (Roche C., Ducasse P., & Liao C., 2011). Due to the lack of academic research and studies concerning the Greek reality, the primary data which is used in parallel with the secondary one is an empirical study investigating the case study of IKEA. The empirical study was made with the form of interviews and distributed questionnaires to top executives and employees of DIY sector and particularly from IKEA company.

The results of the research findings display that DIY sector in the Greek retail market has the potential to develop further and despite the current unstable economic environment, it can benefit from the opportunities, which derive from new market standards. Furthermore, the penetration and the influence of global retailing companies on the Greek market was investigated and in particular the firms specializing in DIY. The case of the global DIY giant of home improvement and furniture “IKEA” was examined, in order to present the way an indicative representative of the subject under study operates. IKEA is an enterprise with a worldwide presence in countries developed and under developing/ emerging and with a big influence on the retail field and consumers’ behavior of the country or city that every time operates (Jonsson A. & Elg Ulf, 2006). IKEA is a point of reference for all multinational firms and competitors and although it implements a similar “standardized” international strategy, it depicts remarkable adaptation possibilities whenever is necessary. IKEA’s main message and vision is “*Make a better everyday life for the many people*” and implements this on everything that is involved in (Jonsson A., 2008).. The results of the research also showed that international DIY firms made the concept of “DIY” familiar to Greek consumers and in a way helped them understand that they can repair, create, decorate, renovate and do

things themselves, cleverly and affordable. Although DIY market and DIY retailers have the potential to survive from the declining and unstable retailing market, certain changes will need to be made, primarily in the field of after sales service. It is an area that according to the findings of this study, consumers consider important enough.

6.1. Limitations

The study presented certain limitations. The most important of the limitations was the lack of literature concerning Greece. Furthermore, another limitation is the unstable economic environment within which every member of the retail industry performs nowadays. Within this frame, consumer's expectations towards development and market recovery are less positive and stable. Also, the size of the sample and the fact that the segmentation of the DIY market is not exactly the same in all countries and so data could not be generally applied are other limitations. Despite the fact that IKEA is a DIY retailer, in the official reports and statistics it does not listed in the DIY sector, but in the Furniture one.

6.2. Recommendations

Taking into consideration all findings, recommendations are made on the possible business opportunities for success and development, which can be taken in advantage by the firms in DIY sector in Greece. According to the findings of the study, consumers nowadays seek for products which are **“Value for Money”**. DIY concept coincides with the above and it seems easier to be achieved. Consumers adapt their shopping behaviour and habits, to be able to adjust to the changing economic conditions and this is a challenge for the all firms (Koksal M. H., & Ozgul, E. 2007). In addition to the present study, also on the survey conducted by BCG (Roche C., Ducasse P. & Liao C. 2011), in the top list of consumer values are “Health”, “Value for Money” items and “Home”. So, the firms which can apply a similar communication harmonization with the right sequence of values can benefit compared to competitors. They are more likely to communicate their offer to the consumer and to be perceived as those being able to satisfy consumers' needs.

The explosive penetration of private label products in almost all product categories is also remarkable, as the market data indicate and the relevant researches. Consumers select private label products as a way to reduce costs, seek better prices for their purchases from hyper markets, supermarkets and discount stores. The loyalty of customers, who can switch freely between retailers, has been influenced among other by the increased usage of private label, as both a store loyalty builder and a ready alternative to branded products, reducing risk and customer's resistance to switch brands (Steenkamp J-B. & Dekimpe M., 1997). Customer loyalty to store brands is only possible, if they have a favorable image. Quality is a major factor in consumer purchase decisions and as private labels have substantially narrowed the perceived quality gap, the higher priced national brands have lost their competitive edge (Boutsouki Ch., Zotos Y. & Masouti Z., 2009). DIY firms have the ability to provide their own brands and gain profit and market share.

There are also some main trends resulting from research, which could be addressed for further research and development and could benefit DIY firms. Namely, these are: a) **New values**: “*Conscientious*” as

opposed to conspicuous consumption is on the rise with a marked and continued shift away from luxury and status and toward financial prudence and stability. Consumers are also looking for products that have healthy, safety, environmental benefits. *Sustainable Development* is the new trend of the years ahead. The ‘availability’ and the ‘price’ of environmentally friendly products have been identified as the most significant issues common to India, Greece and the UK (Bhate S., 2002). b) **New shopping channels:** the digital revolution is transforming shopping behavior .c) New communication and market channels created by the Internet expansion, the spread of smart-phones and the growing use of social networking sites posing this way new rules on trade and market. (Easy access, social media are changing how consumers select, purchase and even use products).d) **Effective external DIY marketing campaigns:** An effective external DIY marketing campaign, mixed with the financial crisis, will bring in more customers who are looking to repair there existing home rather than hire a professional or purchase a new home. Utilizing the Internet and You Tube, a free video-sharing website, a DIY firm may able to encourage and promote DIY projects outside of its stores. e) **Reward Programs / Loyalty cards:** The loyalty card/rewards program will allow management to collect and compile real-time quantitative data in regards to customers purchasing behaviors, and effectiveness of promotions and sales.

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WOMEN PARTICIPATION IN INDIAN MSMES IN GLOBALIZED ERA

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ABSTRACT

Empowering women has become the key element in the development of an economy. With women moving forward, the family moves, the village moves and the nation moves. Hence, improving the status of women by way of their economic empowerment is highly called for. Entrepreneurial activities transform the ideas and creativity of aspiring women into business ventures with high potential and growth. This certainly helps in generating jobs and wealth creation, resulting into a state of well-being and increased opportunities in the country. As more and more women are getting to know the benefits of entrepreneurial activity, a silent renaissance is sweeping across all the sectors resulting in larger participation. In spite of the discrimination against them, women are increasingly taking up the leadership role in economic activity. The objective of the present paper is to study the status of women entrepreneurs, motivating factors behind them and various problems for women entrepreneurs in India. The secondary data was collected from reports, journals, magazines and surfing on the internet. Some of the major problems are women's family obligations, Gender inequality, Problem of Finance and the male - female competition. The paper concludes that the problems of women entrepreneurs can be overcome by appropriate training, incentives, encouragement, motivation, and family's moral support

Keywords: Women entrepreneur, Motivational factors, Challenges and problems

Introduction

Micro, Small and Medium Enterprises (MSME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. MSMEs not only play crucial role in providing large employment opportunities at comparatively lower capital cost than large industries but also help in industrialization of rural & backward areas, thereby, reducing regional imbalances, assuring

more equitable distribution of national income and wealth. MSMEs are complementary to large industries as ancillary units and this sector contributes enormously to the socioeconomic development of the country.

Registered Sector: Enterprises registered with District Industries Centres in the State/ UTs., KVIC/ Khadi and Village Industries Board, Coir Board as on 31.03.2007 and factories under the coverage of section 2m(i) and 2m(ii) of the Factories Act 1948 used for Annual Survey of Industry having investment in plant and machinery up to Rs 10 crore were considered to belong to registered sector

Unregistered Sector: All enterprises engaged in the activities of manufacturing or in providing/rendering of services, not registered permanently or not filed EM with State Directorates of Industries/District Industries Centers on or before 31-3-2007 are called unregistered enterprises.

- For manufacturing sector, an enterprise is classified as:
 - (a) Micro enterprise, if investment in plant and machinery does not exceed twenty five lakh rupees.
 - (b) Small enterprise, if investment in plant and machinery is more than twenty five lakh rupees but does not exceed five crore rupees.
 - (c) Medium enterprise, if investment in plant and machinery is more than five crore rupees but does not exceed ten crore rupees.
- In case, enterprise is engaged in providing or rendering of services, it is classified as:
 - (a) Micro enterprise, if investment in equipment does not exceed ten lakh rupees.
 - (b) Small enterprise, if investment in equipment is more than ten lakh rupees but does not exceed two crore rupees.
 - (c) Medium enterprise, if investment in equipment is more than two crore rupees but does not exceed five crore rupees. (Source: Annual Report 2012-13, Government of India)

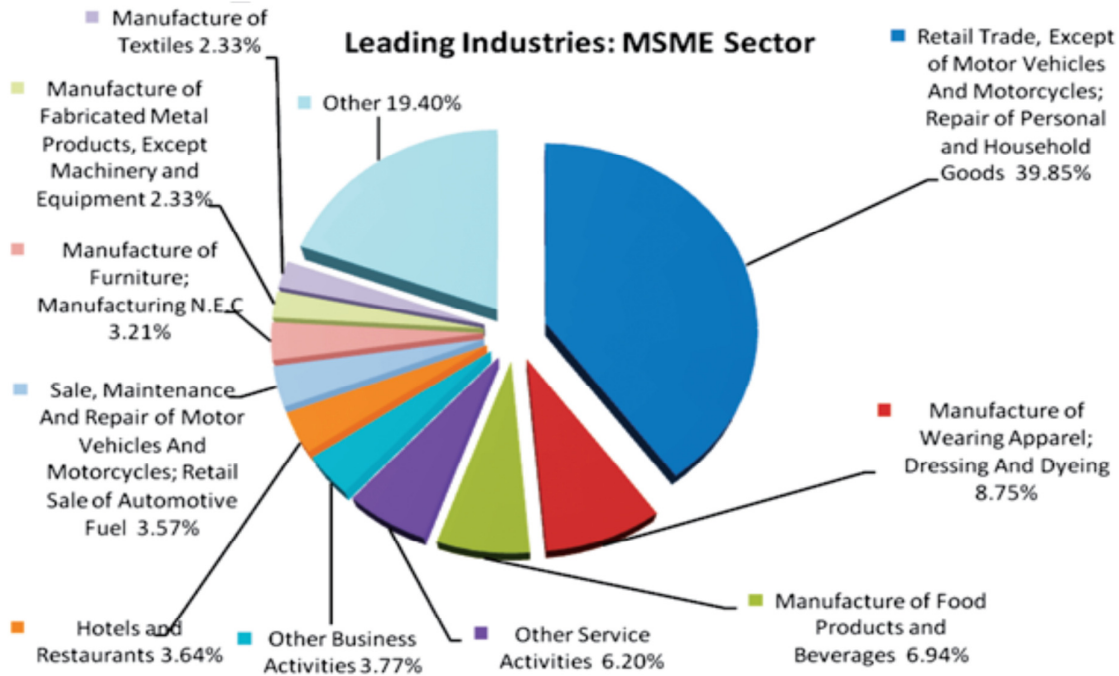


Figure 1. Leading Industries of MSME Sector (Annual Report 2012-13, Government of India)

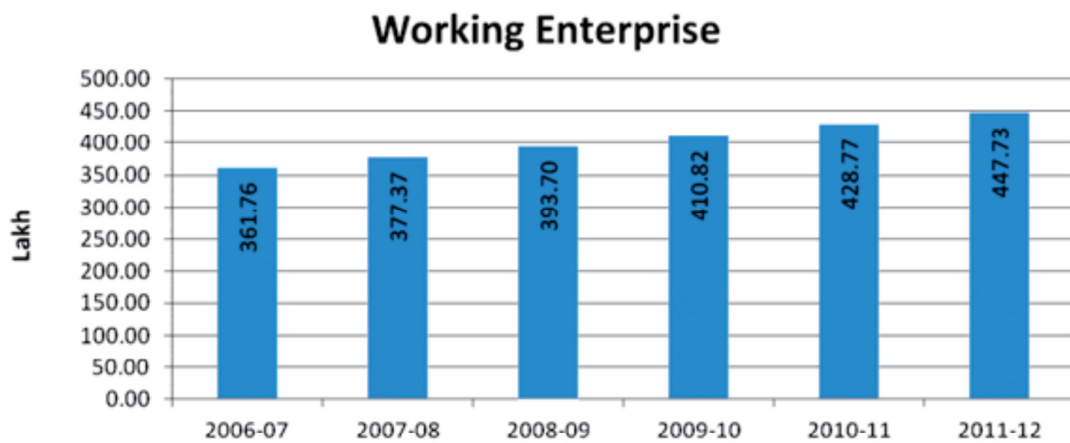


Figure 2
Projected data for the years 2007-08 to 2011-12. (Annual Report 2012-13, Government of India)

Women in MSMEs

Entrepreneurship amongst women has been a recent concern. Women Entrepreneurs may be defined as the women or a group of women who initiate, organize and operate a business enterprise. Government of India has defined women entrepreneurs as an enterprise owned and controlled by a women having a minimum financial interest of 51% of the capital and giving at least 51% of employment generated in the enterprise to women.

Women across India are showing an interest to be economically independent. Women are coming forth to the business arena with ideas to start micro, small and medium enterprises. They are willing to be inspired by role models- the experience of other women in the business arena.³

Over the past five decades, phenomenal changes have been taking place in the status and work place situation of women in India. Still, women entrepreneurs constitute a very small proportion of registered Indian entrepreneurs, only 13.72 per cent of enterprises in the registered MSMEs sector being women-led enterprises (that is approximately 215.000 enterprises).

Historical pattern of women’s entrepreneurship in India: Women’s entrepreneurship development has emerged particularly in the wake of increasing globalization, with the support of progressive social, economic and political cross currents, technological advancement, and the media. In the 1950s, only those women who had no male income-earners within their family became themselves income generators. In the 1960s, women began to start small enterprises at home. Those were activities for self-occupation rather than for achieving financial autonomy. In the 1970s, income generation and career choices became equally important for many women. In entrepreneurial roles, the women increasingly wanted their enterprise to grow and succeed. Women often joined their fathers’ or husbands business as contributing partners on an equal footing in the 1980s. They made personal choices, stood up for their convictions and had the courage to make new beginnings. The women in 1990s increasingly learnt to live alone, travel alone and if need be to rear children alone. In the twenty first century even more opportunities arise for women and they increasingly venture to build enterprises.

Status of women entrepreneurs in India: A report published by ESCAP in 2005 titled “Developing Women Entrepreneurs in South Asia” pointed out that in India, a majority of women entrepreneurs in SMEs fall within the age group 25-40 years. The states of Gujarat, Maharashtra and Karnataka count a greater proportion of entrepreneurs, mostly women from families which are already in business or have service-related backgrounds. Sixty-five per cent of the population in India lives in villages; Self Help Groups (SHGs) have paved the way for economic independence of rural women involved in micro entrepreneurship. (Hina Shah)

Ownership by gender of owner: The proportion of women-managed enterprises is slightly higher in rural areas than in urban areas.

Table 1. Percentage Distribution of Enterprises by Gender of Owner in Rural and Urban Areas
(MSME Annual Report 2011-12, Ministry of MSME, Government of India)

AREA	FEMALE	MALE
Rural	15.27	84.73
Urban	12.45	87.55
All	13.72	86.28

Percentage distribution of enterprises by gender of owner and sector: Dominance of males in

ownership was prevailing in each of the three segments of MSME sector. Most of the women enterprises are Micro Enterprises with 14 per cent share in total share of women enterprises. In Small and Medium segment, it is only 5 per cent and 4 per cent, respectively.

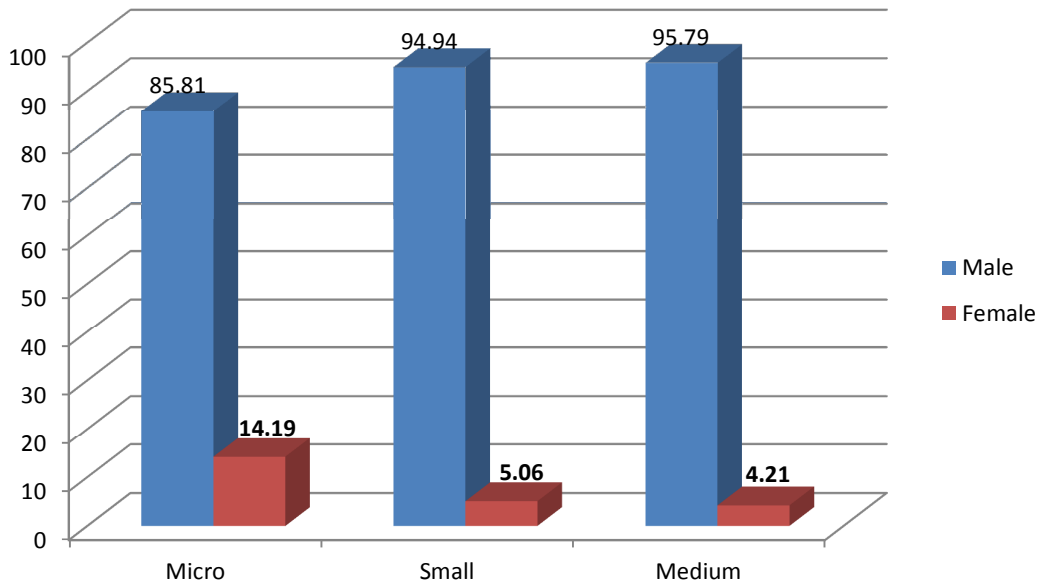


Figure 3 Percentage Distributions of Enterprises by Gender of Owner and Sector

State-wise Entrepreneurship Profile: In India the number of enterprises owned by males was 13, 49,320 compared to 2, 14,650 owned by females, which shows that female only owned about 13.72 per cent of enterprises in the country. With regards geographical spread of female entrepreneurship across India, Tamil Nadu has highest numbers followed by Kerala, Karnataka and Gujarat. The lowest number of women entrepreneurs, are found in Chandigadh, Dadra & Nagar Haveli and Arunachal Pradesh.

State-wise and Area-wise Entrepreneurship Profile in Percentage:

Prior to 2006, MSME sector was known as Small Scale Industries Sector (SSI) and according to 2001- 02 (3rd Census of SSI units), the number of units registered with SSI was 13.74 lakhs of which women enterprises had a share of 10 per cent. The eastern states of India such as Manipur, Tripura, Meghalaya, Assam have higher percentage of women enterprises out of the total number of enterprises in India, followed by southern parts of India – Kerala, Tamil Nadu, Karnataka, Pondicherry. It is observed that there are marginally higher percentages of women entrepreneurs in rural areas (15.27 per cent) than in urban areas (12.45 per cent).

Type of enterprise vs. entrepreneurship profile: Out of total female enterprises (2,14,650), almost 98 per cent (2,10,660) are Micro Enterprises, 1.80 per cent are Small and only 0.05 per cent are Medium enterprises. Thus, the trend is established that in India, the majority women are in micro enterprises (where the investment is less than INR 25 lakhs in manufacturing industry and less than INR 10 lakhs in service industry). An insignificant number of women are in medium and small-scale enterprises.

Nature of activity vs. entrepreneurship profile: Majority of women enterprises are in manufacturing

sector (50.4 per cent) compared to 70 per cent male enterprises in the manufacturing sector. Service enterprises account for almost 40.9 per cent of female enterprises, as compared with 12 per cent of male enterprises. The same pattern is depicted in rural and urban areas.

According to Hina Shah, though women-managed MSMEs in India only account for 13.72 per cent of total registered MSMEs, they have significantly contributed to the growth of the national economy. Following are their findings:

- The majority (65 per cent) of women entrepreneurs within the sample belonged to the age group 30 to 49 years, while 30 per cent of them were above 50 years of age. Most women entrepreneurs surveyed were from urban areas. Some 84 per cent of them were married.
- A prior business background in the family did not appear necessary for women to start/run a business successfully.
- Most women business owners were previously either house wives. They were graduates or postgraduates.
- Women respondents appeared to have little concern for making profit and had often chosen business to forge and assert their own identity. The respondents also tend to use entrepreneurship as a tool for fulfilling career aspirations. Some 51 per cent of women devoted 25-50 hrs. Per week to their business.

The reasons frequently cited for starting a business were for the sense of self-achievement, for economic independence, for profit making aspirations and to support their family.

(Source: MSME Annual Report 2011-12, Ministry of MSME, Government of India))

Review of Literature

The following relevant studies have been reviewed for the purpose of study:

Robita and Nandita(2011) explained the main reason of non availability of finance to women is their inability to provide collateral as they do not have any property on their name. On the other side women have got restricted mobility freedom and have to perform dual role one at family and other at work which hinders the entrepreneurial growth. The technological advancement and information technology explosion has reduced the problem of women entrepreneurs.

Siddiqui (2011) identified that major problems are women's family obligations, Gender inequality, Problem of Finance, Low-level risk taking attitude, and the male - female competition. The problems of women entrepreneurs can be eradicated by appropriate training, incentives, encouragement and motivation, social recognition of their entrepreneurial abilities, and family's moral support.

Bhatnagar et al (2012) observed that women in India start their own businesses from a desire for self-determination and for career challenge and that they expect the corresponding respect, recognition, and self esteem that both self-determination and challenge provide. Women entrepreneurs faced constraints in aspects of financial, marketing production, work place facility and health problems. Financial problems faced were non availability of long-term finance, regular and frequent need of working capital. Poor location of shop and lack of transport facility were major marketing problems.

Gitabali and Shagufta (2013) observed that women have taken up the enterprise mainly to earn money, which is required for the livelihood of their families. They have the desire to become economically independent. Financial problems are the main problems for running an enterprise. The other problems are lack of infrastructure particularly for marketing. Lack of proper government support was also perceived as one of the problems. Women entrepreneurs are still facing stiff opposition. The hindrance or objections these respondents faced are mainly because of the attitude among a large sections of people that women are not supposed to take on such active roles.

V.Darling Selvi (2013) identified problems encountered by the women entrepreneurs range from finances to market orientation and education. Their inability to understanding the dynamic structure of market coupled with lack of family support and access to finances are few major reasons which restrict the growth of their businesses. Moreover, the influence of their family members on their decisions jeopardizes the performance of their businesses, though; their involvement is helpful in a way that allows them to transport their products to the market and purchase of the raw material.

Agrawal and Joglekar (2013) studied that total personality of the women was changed. They developed leadership, marketing, politeness skill from business. The financial status of their families improved significantly after starting the small scale business. But there is an urgent need of persistent technical training to these women to improve their overall status.

C.P. Kothawale (2013) identified problems faced by Women Entrepreneurs in setting up and running business units are less confidence, non-availability of finance, socio-cultural disturbance, lack of education and awareness, low level of risk taking attitude and competition from male entrepreneurs. Women entrepreneurs get support and encouragement from family, society, Government and financial institutions, such positive effort can open new avenues for them.

Objectives:

The study has been conducted with the following objectives:

- To analyze the factors influencing women to become entrepreneurs
- To identify the problems faced by women entrepreneurs in India
- To identify the efforts took by the Government for development of women entrepreneurs

Research methodology:

.The study is based on secondary data. Secondary data have been collected from project documents, evaluation reports, journals, magazines and surfing on the internet. The data have also been collected from other relevant web sites of central and state Govts and Ministry of MSME.

Discussion and Analysis

The data collected have been analyzed in three parts comprising i) problems of the women ii) factors influencing for women entrepreneurship iii) Government efforts for women entrepreneurs encouragements.

1. Problems of Women Entrepreneurs in India

Keeping in mind the objectives of study, state-wise data have been compared to know the maximum and minimum participation of women in different states and their common problems. With respect to this the data have been presented in table 1.

Table 1: Women Entrepreneurship Development in Select Leading States.

States	No. of Registered Units	No. of Women Entrepreneurs	Percentage
Tamilnadu	9618	2930	30.36
U.P	7980	3180	39.84
Kerala	5487	2135	38.91
Punjab	4791	1618	33.77
Maharashtra	4339	1394	32.12
Gujarat	3872	1538	39.72
Karnataka	3822	1026	26.84
M.P	2967	842	28.38
Other States and UTs	21920	5308	24.22
Total	64796	19971	32.82

The analysis of data in Indian states shows that UP has got the highest percentage of 39.84 in number of women entrepreneurs followed by Gujarat which secures 39.72%. Punjab stands fourth in respect to women entrepreneurs. Whereas state of Karnataka has the lowest women entrepreneurs, i.e., 26.84% only. The literature review also shows that women work participation in India is 31.6% whereas in USA it is 45%, UK 43%, Canada 42%, Indonesia 40%, France 38%, Sri Lanka & Brazil both 35%. The low participation of women in India is due to following main problems :

- Socio-cultural barriers – Women’s family and personal difficulties are sometimes a great barrier for succeeding in business career. Very few women are able to manage both home and business efficiently.
- Market-oriented risks – Due to tough competition in the market and lack of mobility of women make the dependence of women entrepreneurs on middleman indispensable. Many business women find it difficult to capture the market and make their products popular. Sometimes, women entrepreneurs are not fully aware of the changing market scenario and hence are not able to utilize the services of media and internet.
- Lack of confidence – Women lack confidence in their strength and competence in Indian society. The family members and the society are reluctant to support their entrepreneurial growth.

However, this situation is changing among Indian women and yet to face a tremendous change to increase the rate of growth in entrepreneurship.

- Knowledge in Business Administration – Lesser educated and untrained women in India need to acquire the skills and knowledge in all the functional areas of business management. This alone can enable women to excel in decision making process and develop a good business network.
- Awareness about the financial assistance – Although there are various institutions in the financial sector which extend their maximum support in the form of incentives, loans, schemes etc. Even then every woman entrepreneur may not be aware of all the assistance provided by the institutions. Also, such sincere efforts taken towards women entrepreneurs do not reach the entrepreneurs in rural and backward areas, effectively.
- Exposure to the training programs - Training programs and workshops for every type of entrepreneur is available through the social and welfare associations, based on duration, skill and the purpose of the training program. Such programs are really useful to new, rural and young entrepreneurs who want to set up a small and medium scale unit on their own. But still, these programs are not able to reach a mass level of women entrepreneurs.
- Identifying the available resources – Women are hesitant to find out the access to cater their needs in the financial and marketing areas. In spite of the sporadic growth of associations, institutions, and the schemes from the government side, women are not enterprising and dynamic to optimize the resources in the form of reserves, assets mankind or business volunteers.⁵

2.Factors which influence women to become entrepreneur:

The analysis of collected data indicates that women are encouraged to become the entrepreneurs due to factors such as:

- **Economic independence:**

In India, nowadays, women are showing an interest to be economically independent. Women are coming forth to the business arena with ideas to start micro, small and medium enterprises. They look out to become role models through their experience in the business arena.

- **Establishing Self identity:**

The long said differences between a man and a woman are becoming a burden for society in the current times. In the developing India, women are seeking opportunities to reveal their identity as stronger and stable as compared to men.

- **Need for additional income:**

In many rural areas like villages and towns, women need additional money to support their family, children and elders. Thus in rural areas there are many options of farming, handlooms etc. which can help in starting MSMEs and further providing that extra income.

- **Building confidence and Risk taking ability**

Being an entrepreneur provides the factor of confidence in women. Entrepreneurship makes a woman to take risks at medium to higher level in this high end society which is also being encouraged in the society and by Government also.

➤ Motivation and Status Equality

Entrepreneurship through MSMEs surely motivates a woman to stand apart from the men and also support their children and family in future. Being an entrepreneur helps a woman reach an equal status with men in our patriarchal society.

3. Government efforts to support women MSME entrepreneurs:

Although women have played a key role in the society; their entrepreneurial ability has not been properly viewed due to the lower status of women in the society. It is only from the Fifth Five Year Plan (1974-78) onwards that their role has been explicitly recognized with a marked shift in the approach from women welfare to women development and empowerment. The development of women entrepreneurship has become an important aspect of the five year plan priorities. Several policies and programmes are being implemented for the development of women entrepreneurship in India. In the words of president APJ Abdul Kalam "Empowering women is a prerequisite for creating a good nation, when women are empowered, society with stability is assured. (Annual Report 2011-12, MSME, Government of India)

Mahila Coir Yojana: The Mahila Coir Yojana is the first women oriented self employment Scheme in the coir industry which provides self-employment opportunities to the rural women artisans in regions producing coir fibre. The Scheme envisages distribution of motorized ratts to women artisans after giving training for spinning coir yarn. The women spinners are trained for two months in spinning coir yarn on motorised ratt at the Board's Training Centres. A stipend of Rs.500/- is paid to the trainee which has been raised to Rs. 750/- per month. (Jayan V.K, 2013)

Several other schemes of the government at central and state level exist, which provide assistance for setting up enterprises for women to make them economically independent. 13- Significant schemes are prevalent in the states of Kerala, Tamil Nadu, Goa and Haryana for the development of women entrepreneurs. Those women-specific schemes are: Scheme for Women Entrepreneurs to set up Industrial Units: Kerala, Entrepreneurship Development Programme for Women: Tamil Nadu, Women's Training-cum- Production Centres and Stipend: Haryana, Swayamsidha (Indira Mahila Yojna): Haryana and Incentives to Women Entrepreneurs Scheme, 2003: Goa.

In 2010, The National Mission for Empowerment of Women was launched by the Government of India in order to strengthen overall processes that promote all-round development of women. The National Resource Centre has been set up which functions as a national convergence centre for all schemes and programmes targeting women. Some of its focus areas are skill development, micro credit, vocational training, entrepreneurship and self-help group development. (Hina Shah, 2010)

Some of the organizations that are associated with MSMEs: Small Industries Development Organisation (SIDO), Small Scale Industries Board (SSIB), National Small Industries Corporation Ltd. (NSIC), Confederation of Indian Industry (CII), Federation of Indian Chamber of Commerce and Industry (FICCI), PHD Chamber of Commerce and Industry (PHDCCI), Associated Chamber of Commerce and Industry of India (ASSOCHAM), Federation of Indian Exporters Organisation (FIEO), World Association for Small and Medium Enterprises (WASME), Federation of Associations of Small Industries of India

(FASII), Consortium of Women Entrepreneurs of India (CWEI), Laghu Udyog Bharti (LUB), Indian Council of Small Industries (ICSI), Indian Institute of Entrepreneurship (IIE), National Institute of Small-Industry Extension Training (NISIET), National Backward Caste Finance Development Corporation, National Institute for Entrepreneurship and Small Business Development (NIESBUD), Small Entrepreneurs Promotion and Training Institute (SEPTI), Small Industries Development Bank of India (SIDBI) etc. (AmanDeep Singh, 2013)

Exhibitions for women under promotional package for micro & small enterprises: Approved by CCEA under marketing support DC (MSME) has formulated a scheme for women entrepreneurs to encourage small & micro manufacturing units owned by women and register in DI/DIC in their efforts at tapping and developing overseas markets, to increase participation of representatives of small/micro manufacturing enterprises under MSME stall at international trade fairs/exhibitions, to enhance export from such units. Under this scheme, participation of women entrepreneurs in 25 international exhibitions is envisaged during the 11th plan (2007-2012). (Shiji shukla, 2012).

Conclusion

Women share 50% population of India; have an important role to play as far as economic development of country is concerned. The Government has understood the importance of women and launched various schemes and programs for their participation in economic activities. The Indian society is also shifting its conservative attitude to progressive attitude. So, women are getting more opportunities not only in entrepreneurial work but also in other domains of human life keeping pace in this Globalized Era. Women should be encouraged to avail the benefits of policy measures introduced by the Government to promote the status and level of women entrepreneurs in the country. Increased support should be provided by the Government to help women entrepreneurs in order to overcome the challenges faced by them. Women entrepreneurs also require support from their family and society. They should be provided easy financial help without putting unrealistic conditions by banks and financial institutions. If women entrepreneurs get support and encouragement from family, society, Government and financial institutions, such positive effort can open new ways for them and increase the marketability and profitability of business owned by them. If the problems of women entrepreneurs are understood properly, they can become successful entrepreneurs.

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ENABLING AND STIMULATING ENTREPRENEURSHIP EDUCATION IN HIGHER EDUCATION INSTITUTIONS: CATALYST FOR VENTURESOME YOUTHS AND SUSTAINABLE DEVELOPMENT IN NIGERIA

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Abstract

Entrepreneurship is increasingly being recognized as a significant conduct for bringing about a transformation to sustainable products and processes, with numerous high-profile thinkers advocating entrepreneurship as a panacea for many social and environmental concerns. Yet, despite the promise entrepreneurship holds for fostering sustainable development, there remains considerable uncertainty regarding the nature of entrepreneurship's role in the area, and the academic discourse on sustainable development within the mainstream entrepreneurship literature has to date been sparse. While entrepreneurs have long been recognized as a vehicle for exploiting emerging opportunities associated with societal need, we have little understanding of how entrepreneurs will discover and develop those opportunities that lie beyond the pull of existing markets. Thus, while the case for entrepreneurship as a panacea for transitioning towards sustainable development society-wide is valid, there exists major gaps in our knowledge of whether and how this process will actually unfold. This paper focuses on:

- Factors that challenge the teaching of entrepreneurship education within the Higher Education Institutions to engender sustainable development and venturesome youths;
- Strategies to employ in addressing these challenges. Factors that Challenge the Teaching of Entrepreneurship Education in Higher Education Institutions;

- Imperatives and outcomes of entrepreneurship education and the state of entrepreneurship education in Higher Education Institutions.

Keywords: Entrepreneurship, Entrepreneurship Education, Venturesome Youths Sustainable Development, Higher Education Institution

1. INTRODUCTION

The world is experiencing one of the most extraordinary periods in history. The power equation continue to shift across countries and regions while rapid changes unfold in the marketplace reshaping both the political landscape and the interactions between governments and businesses. The financial crisis, coupled with rising inflation and the consequent lull in global demand, has engendered significant insecurity about the outlook of the world economy and increased anxiety about its potential implications on the accomplishment of the Millenium Development Goals by 2015. However, it is in difficult times when the power of collaboration bears fruit, helping us better understand the challenges we face and encouraging us to unleash our imagination and capitalize on the opportunities ahead. Entrepreneurship and education are two such extraordinary opportunities that need to be leveraged and interconnected if we are to develop the human capital required for capacity and capability building country wide. Entrepreneurship is the engine fuelling innovation, employment generation and economic growth. It is the necessary lubricant that oils the wheel of progress economy-wide. Thus, it is only by creating an environment where entrepreneurship can prosper and where entrepreneurs can try new ideas and empower others can we ensure that many of the world's issues will not go unaddressed. Equally important is the power that education has in developing the skills that generate an entrepreneurial mindset and in preparing future leaders for solving more complex, interlinked and fast-changing problems. Education needs to come back to the top of the priorities of governments and the private sector and be seen as the fundamental mechanism for attaining sustainable economic development and societal advancement. More than ever, the world needs effective global leaders and stronger educational systems that prepare the current and future generations of entrepreneurs, workers, teachers, managers and individuals with the skills needed to succeed and help others. The need for entrepreneurship education started emerging in the

mid 1980s. This is because before this period, unemployment and poverty were not a national concern as it is currently. However, political instability, policy shifts, policy reversals, policy somersault and consistently inconsistent gamut of social and economic policies of successive government led to the emergence of high level unemployment in Nigeria. In the mid 80s, the Nigerian economy collapsed, while youth and graduate unemployment was on the high side. There was large-scale layoff of workers and early retirements as a result of structural adjustment policies and bad economic trends in the country. In the face of this situation, entrepreneurship, which would have salvaged the situation, was not encouraged.

It has been observed that tertiary education has not been properly included in the philosophy, of self-reliance such as creating a new cultural and productive environment that will promote pride in primitive work and encourage people to take part actively in entrepreneurial activities and participate actively in discussions and decisions affecting their general welfare while promoting new sets of attitudes and cultural values for the attainment of future challenges. Oluwasanya (2013) opined that the failure of higher education institutions to institutionalize and inculcate venture-some and enterprising behaviour in undergraduates has led to wastages in terms of both human and natural resources. To be enterprising is to keep your eyes open and your mind active. It is having a paradigm shift, requisite skills, confidence, creativity, passion and possibility mentality to create and seize business opportunities so as to translate into new venture creation and new products or services to the market. This is because the youth and graduate from tertiary institutions are not equipped with the skills with which to exploit the natural resources that bound in Nigeria. Sustainable development has emerged as an influential, yet controversial concept for business and policy. There are observed awareness Nigeria-wide that a fundamental transformation in the way society consumes natural resources and produce energy may be required if we are to make progress in pressing environmental issues such as ecosystem degradation and global climate change. With this in context, entrepreneurship is increasingly being dangled as the pertinent source and solution to facilitate sustainable products and processes. Despite the promises entrepreneurship holds in engendering sustainable development, there are some observed uncertainty as regards the nature of entrepreneurship roles in the area of sustainability and how it may manifest. The whole idea of entrepreneurship is about self employment which will generate employment opportunities to others that must work with him as he cannot work alone. Therefore, it is possible to suggest that entrepreneurship education concerns entrepreneurs, entrepreneurial /enterprising process and as an outcome, the enterprise of whatever context or conceptual content it relates to as well as the dynamics between them. Consequently, revising the terminology of entrepreneurship education from the

perspective of education, it is possible to focus the debate on its core element and identify its key dimension as Scott et al. (1998) recommends. Taking the entrepreneurship as a point of departure, key dimensions concern the interplay between the actor, the process and the outcome. This paper reviews the factors and challenges inherent in the teaching of entrepreneurship education in Higher Education Institutions. It further elucidates the strategies to employ in addressing the challenges and enhancing the teaching of entrepreneurship education within the entire academic precinct of the Higher Education Institutions in Nigeria.

2. Conceptual Framework

Within the first decade of Nigeria's independence (1960 – 1970) the country was mainly agrarian; it thus depended on agriculture both for local sustenance and foreign exchange generation. The education system was directed at production of graduates for government employment. It thus continued graduating students without taking cognizance of the labour market. The matter of unemployment and poverty were not issues of national concern. The economy though monolithic was flourishing. The public service at that time was capable of absorbing up to 70% of the labour force. The economy progressed and was further reinforced by the oil boom of the 1970's. However, the trend changed by 1980's when following political instability and inconsistencies in the socio-economic policies of governments the economy began to crumble. There was unmanageable escalation in the rate of unemployment and poverty. As a result the country experienced collapse of several business enterprises, high rate of retrenchment and retirement of workers. The menacing problem of unemployment and poverty spurred the Nigerian government into developing a policy framework for youth entrepreneurship education. This saw the birth of the National Directorate of Employment (NDE) in 1986, and the Work For Yourself Programme (WFYP) in 1987. Both programmes were joint programmes of training and financial support to entrepreneurs. The NDE was however more extensive and included three core programmes namely the Youth Employment and Vocational Skills Development Programme; the Agricultural Programmes, and the Small Scale Industries and Graduate Employment Scheme. It was charged with a number of responsibilities including the following:

- a) to create employment opportunities and thereby reduce unemployment among youths and university graduates in the country
- b) to provide an enabling atmosphere for self reliance
- c) to foster entrepreneurship

Both the NDE and WFYP made impacts on the economy as they were able to empower young graduates

in the task of job and wealth creation through entrepreneurial thinking. However, the youths were also confronted with the problem of non-possession of sound knowledge of entrepreneurship. In an effort to fill this gap the NDE introduced the Entrepreneurship Development Programme (EDP) which has as its principal function the offering of functional education for the youth to enable them to be self employed and self reliant. This marked the beginning of policy statements encouraging the teaching of entrepreneurship education in Nigeria. These efforts notwithstanding the problem of graduate unemployment continued to soar high and constituted a major problem of the Nigerian nation. It could therefore be logical to say that tertiary education in Nigeria failed to meet the employment requirements of its teeming graduates. In order to further address this issue, the Federal Government of Nigeria launched the National Economic Empowerment and Development Strategy (NEEDS) with the vision of equipping youths with various skills to make them self reliant and consequently make poverty a thing of the past in the country. In order to realize this vision, NEEDS focused on four key strategies: namely; reorienting values, reducing poverty, creating wealth and generating employment. (National Planning Commission, (NPC) 2005). To ensure co-ordination, it was matched with endorsement by states as well as a commitment to the development of their own State Economic Empowerment Strategy (SEEDS) (NPC 2005). Consequently, the National Universities Commission recently introduced Entrepreneurship as a course into the curriculum of Universities in Nigeria. The aim was to challenge and equip its graduates with entrepreneurial skills. While the progress is impressive it is still quite limited.

A vast majority of Nigerians especially young graduates still cannot easily access entrepreneurship education and entrepreneurship resources. Identifying the elements of entrepreneurship education starts by looking at the terms used for it. A study conducted in 1989 by Durham University Business schools identified different terms in the USA, Canada, UK and other USA and CANADA whereas the terms 'enterprises education' was used in the UK and Finland, revealed difference in terms (Erkkila 2000). In order to avoid conceptual confusion Erkkila suggest that we should use a single concept of entrepreneurial education'. Allan Gibb posits that there is a substantial synonymity between entrepreneur and enterprising behaviours. The only major distinction that can be made is that an entrepreneur actor is traditionally associated with business activity (Gibb, 1993). In his later writing Gibb (2001) has started to use these terms synonymously. The concept of entrepreneurship is associated with a number of activities including the following:

- a) the ability to create and build something from nothing
- b) the ability of having a vision matched with focus and determination of building an enterprise.
- c) the skill for seeing an opportunity where others fail to do so.
- d) the ability to build a working team to complement your own talents and efforts
- e) the ability to aggregate, marshal and control resources judiciously
- f) the willingness and ability of innovativeness and creativity
- g) the willingness to undertake personal and financial risks
- h) the ability to engage in activities despite all odds and in fact surmounting these odds and possibly turn

them into your own favours.

3. Literature Review

Education is the acquisition of knowledge, the aggregate of all processes through which a person develops ability, attitudes and other forms of behavior with positive values in the Society in which he lives. Fafumwa (1991) describes education as all efforts, conscious and direct, incidental and indirect, made by a given society to accomplish certain objectives that are considered desirable in terms of the individual's own needs as the needs of the society where that education is based. But Erder (1966) regards it as a manpower industry producing the knowledge and skills necessary for development. Education is derived from the needs and demands of the society thus it is seen as a microscopic reflection of the total society needed for both stability and continuity. *Entrepreneurship is the ability to create and build something from practically nothing. It is initiating, doing, achieving and building an enterprise or organization, rather than just watching, analyzing, or describing one. It is the knack for sensing an opportunity where others see chaos, contradiction and confusion. It is the ability to build a "founding team" to complement your own skills and talents. It is the know-how to find, marshal and control resources (often owned by others) and to make sure you don't run out of money when you need it most. Finally, it is the willingness to take calculated risks, both personal and financial, and then do everything possible to get the odds in your favour.*

Entrepreneurship refers to an individual's ability to turn ideas into action. It covers creativity, innovation and risk taking, and the ability to plan and manage projects in order to achieve objectives. This supports everyone in day-to-day life at home and in society, makes employees more aware of the context of their work and better able to seize opportunities, and provides a foundation for entrepreneurs setting up social or commercial activities.

From the foregoing, this book seeks to contribute the under-listed acronym to the term entrepreneurship:

Examine needs, wants, and problems.

Note and narrow down the possible opportunities to one specific "best" opportunity.

Total commitment with high work ethics

Reliable and passionate

Enterprising personality and behaviour

Proactive and pragmatic

Relationship Management expert

Energetic and competitive by nature

Never allow reactivity or limiting belief

Emphasise on key performance indicators and critical success factors of the business.

Understanding of the need for commitment and high work ethics.

Realistic and positive accomplishment and creative destruction

Seized by passion to make things happen positively for the business.

Highly focused and motivated

Innovator with inner drive for success.

Possibility mentality

Source: Oluwasanya A.T (2012)

Entrepreneurship education is a relatively new academic discipline. It is multidisciplinary in nature, having strong emphasis in economics, covering business disciplines like management, marketing, and finance; and closely linking with other disciplines like psychology, sociology, anthropology, teacher and business education. It goes beyond textbooks teachings and involves a wide spectrum of life ideas drawing practically from life experiences. Although its development is quite recent, the phenomenon has been recognized as a key factor in economic growth of any nation. Entrepreneurship Education is therefore that education which assists students to develop positive attitudes, innovation and skills for self reliance, rather than depending on the government for employment, this will in-turn produce graduates with self confidence and capacities for independent thought to discover new information leading to economic development (Emeraton, 2008). Entrepreneurship education is the type of education designed to change the orientation and attitude of the recipients and the process will equip them with die skills and knowledge to enable them start and manage a business (Agu, 2006). Agreeing with Emeraton (2008), he opined that entrepreneurship education aims at developing the requisite entrepreneurial skills, attitudes, competencies, and disposition that will predispose individual to be a driving force in managing a business. Akpomi (2019) also holds the view that entrepreneurship education focuses on developing understanding and capacity for pursuit of entrepreneurial behaviours, skills and attitudes in widely different contexts. He continued that this type of education is open to all and not exclusively domain of the some self acclaimed business gurus. He concluded that these behaviours can be practiced, developed and learned therefore it is important to expose all students to entrepreneurship education. Osuala (2010) defined entrepreneurship education as a programme or part of a programme that prepares individuals to undertake the formation and or operation of small business enterprises which also includes franchise operations for the purpose of performing all business functions relating to a product or service with emphasis on social responsibilities, legal requirement and risks for the sake of profit involved in the conduct of private business enterprises. From the above definition, it is evident that entrepreneurship education could turn around the economic fortune of Nigeria by providing jobs and reduce the unemployment rate in Nigeria hence reducing the poverty level of Nigerians. It could also help an individual to identify investment opportunities and help them to harness untapped natural

resources in Nigeria in order to produce the goods and services needed in the country. These will no doubt reduce or eliminate poverty and help to increase per capital income in the country which is one of the cardinal points of Millennium Development Goals (MDGs). Despite controversies surrounding it, sustainable development has emerged as an increasingly influential concept in managerial and academic settings. Sustainability has become a mainstay of corporate strategy, with nearly every major firm having a vice-president level executive with “sustainability” in his or her title. Most large firms now have explicit public sustainability policy statements and claim to apply a “triple bottom line” that considers a firm’s financial, environmental, and social performance (Elkington, 1998). All manner of waste reduction and resource reduction and resource substitution are rewarded as symbols of good corporate citizenship (Clelland et al. 2000). In many circles, the term “corporate sustainability” has become a synonym for “corporate social responsibility”. The term "sustainable development" was first muted at the United Nations Conference on the Human Environment in 1972 and later gained prominence by way of a report to the United Nations by the World Commission on Environment and Development (WCED.1Q87). The definition emerging from the report, "Sustainable development is development that meets the needs of the present generation without compromising the ability of future generations to meet their unmet needs"

At its core is the notion that all natural systems have limits, and that human well-being requires living within those limits. Sustainable development implies that renewable resources should be applied whenever possible and societies could somehow have their cake and eat it too and that the opportunities to develop in ways consistent with all three objectives (social, environment and economic) are bountiful - the assumption being that firms and nations could utilize resources in such a way as to promote abundance for current generations without sacrificing opportunities for the future ones. This assumption grew out of a desire to promote equitable distribution of the benefits of economic growth, This desire emerged from the realization that resources were growingly insufficient to allow the so-called developing world to develop along the same lines as the first world.

Objectives of Entrepreneurship Education

Entrepreneurship education according to Oluwasanya (2013) is structured to achieve the following objectives.

1. To offer functional education for the youth that will enable them to be self-employed, self-reliant and subsequently encourage them to drive profit and be self-independent.
2. Offer tertiary institution graduates with adequate training in risk management, creativity, innovativeness in identifying new business opportunities and support necessary to help them establish a career in small and medium size business
3. To inculcate the spirit of perseverance and possibility mentality in the youths and adults which will enable them to persist in any business venture they embark on.
4. To serve as a catalyst for economic growth and development.
5. To stimulate industrial and economic growth of rural and less developed areas.
6. To reduce high rate of poverty.
7. Stimulates job creation.
8. Employment generation.
9. Reduction in rural-urban migration.
10. Create smooth transition from traditional to a modern industrial economy.

Not everyone needs to become an entrepreneur to benefit from entrepreneurship education, but all members of society need to be more entrepreneurial. The public sector, private sector, academia and non-profit sectors all have roles to play in facilitating the development of effective ecosystems that encourage and support the creation of innovative new ventures.

Challenges of Entrepreneurship Education

There are several factors that challenge the teaching of entrepreneurship education in higher education institutions notably;

- a) Nigeria's macro-economic environment is unhealthy and unstable for a virile entrepreneurship development
- b) The fear of failure by the people to take risk on entrepreneurial activities, bile an unstable and conducive political environment drives away investor that are planning to embark on entrepreneurial activities.
- c) In addition, government programmes are not designed to promote entrepreneurship and enterprising behaviour,
- d) The level of infrastructural development provided by the government is still very low and this has been affecting to a very high extent the level of entrepreneurial activities in the country.
- e) The high rate of many business enterprises as winding up prematurely consequent upon the employable and unemployable youths and adults idle away. It is against this backdrop that this paper set to leek into entrepreneurship education as imperative for sustainable development in Nigeria.
- f) There should be some form of genuine school work based learning incorporated in some studies as part of the national economic development strategies. The development of apprenticeship scheme would give new graduates some work skills and experience.
- g) Poor local public and private funds to create a small venture capital fund.

- h) Absence of school-based enterprises where students identify potential business, plan, create and operate small business using the school as mini-incubators.
- i) Absence of venture-some or enterprising behaviour: The polytechnic, students and educators must develop an enterprising or venture-some behaviour such as opportunity orientation, commitment to opportunity orientation, commitment of resources etc
- j) *Competency of Educators*: Weidman (1977) defined competency as an attitude, behaviour, skill or understanding demonstrated by a learner at a specified level of performance. The current situation is that most lecturers have not been trained in entrepreneurship. Consequently, they may be unaware of the right approach to entrepreneurship teaching. Teachers should have a better understanding of entrepreneurship education and the range of aims, methods and contents of it. There is need to train the trainers through local and international seminars and workshops and to disseminate understanding of different ways and methods to support the entrepreneurial mindset.
- k) There seems to be in general a gap between the teaching methods considered to be most effective for fostering entrepreneurship education and those that are currently used. In many cases, on the job training on entrepreneurship is provided by external organizations delivering programmes to Higher Education Institutions. Higher Education Institution's educators who are not competent in entrepreneurship education may not be able to teach it. Entrepreneurship Education is new in Higher Education Institution's curriculum and it is obvious that most of the lecturers may not be competent to teach it.
- l) Lack of an interdisciplinary way of working on concrete projects. Opportunities are missed when teachers prefer to focus on their own courses rather than to consult with other teachers and propose a wider integration of different learning subjects.
- m) *Absence of relevant textbooks*: Since entrepreneurship education is a new inclusion into Higher Education Institution's curriculum, there is also the problem of lack of adequate textbooks on it. This has really challenged the teaching of the course in polytechnics and other higher education institution.
- n) *Inadequate Enablers*: It is quite glaring that most polytechnics and other higher education institutions have not been able to provide adequate facilities and equipment to cope with the increasing enrolment of students.
- o) *Inadequate Funding* : Inadequate funding of Higher Education Institutions has often affected the teaching and learning of Entrepreneurship. It is the major reason for inadequate facilities and equipment in the institution.

- p) *Poor enterprise culture*: Due to lack of adequate training centres and enterprises, students are faced with the problems of getting appropriate establishment to gain experience. They end up attaching themselves to roadside vendors and entrepreneurial ventures where they often acquire wrong enterprising culture and skills. This is contrary to the goals of students' Industrial Work Experience Scheme (SIWES) which is expected to provide students with opportunities of exposure to practical experiences and relating the knowledge and skills learnt in the classroom to the business parlance

The list is endless but it sums up the in-explainable realities of our prevailing predicaments.

Educational for Sustainable Development

Education for Sustainable Development is the focus or projection of education that seeks to equip people towards creating a sustainable future. Stakeholders such as government, businesses, educational institutions, media, and organizations play pertinent roles in achieving sustainable development. Each of these sectors has a different vision of sustainable development. Some are interested in environmental preservation and protection; some have economic development interests while other may be more interested in social development. According to UNESCO (2000) the way each nation, cultural group and individual views sustainable development will depend on its own values. In many European nations, Universities and technical colleges trained students of science, economics and business management in skills that helps to build more sustainable societies. Programmes such as Peace Education, Human Right Education, Environmental Education and "Youth Entrepreneur" schemes are carried out in many schools. Hence, such initiatives help students and teachers to gain an understanding of the inter-linkages needed for sustainable development. The emphasis has been on education that will provide life and occupational skills that will enhance the venturesome and enterprising potentials of individual, reinforcing self-sufficiency and improving quality of life.

Entrepreneurship Education and Sustainable Development in Nigeria.

The Nigerian government realised the need to break away from the vicious cycle of poverty, infrastructural inadequacies, corruption and other notable gamut of social problems. It must be noted that after 45 years of achieving colonial independence, it cannot be justified that Nigeria has attained her optimum level of development. According to Kolawole and Omolayo (2006), many individuals have difficulties in translating their business ideas to realities and creating new business ventures because of lack of necessary information and skills needed to achieve their targets. To him, the university curriculum was in the past oriented towards making graduates suitable only for white-collar jobs. This underscores why millions of our youths and a lot of university graduates roam about the streets of the major cities and towns in search of white-collar jobs. It is therefore necessary and expedient to position Nigerian universities to stimulate economic growth through a deliberate agenda of production of entrepreneurial

graduates. In many countries, including US, Higher Education Institution's offer entrepreneurship education for life-long trade and many of them offer courses that enable students to meet their general academic requirement while learning a trade. However, because of the recent challenges in world economy Higher Education Institution's have shifted emphasis to entrepreneurship education, information technology and related fields. Higher Education Institutions work closely with willing industries to establish curriculum and programmes to meet their needs. The apathy towards entrepreneurship education is vitiating the contribution which the nation's graduate would have made to the economy. In Nigeria, graduates of Higher Education Institutions become highly skilled entrepreneurs.

Vitiating Elements of Entrepreneurship Education

In the following list, the risks and obstacles are divided into three broad categories, showing the levels at which action needs to be taken notably:

Policy framework:

- There is no dialogue and cooperation between different departments in the public
- Administration that should be responsible for entrepreneurship education policies and actions.
- There is no national strategy or plan to implement entrepreneurship education that includes all stakeholders (public and private), so students cannot choose such training as of right.
- There is no legitimate and coherent institutional system. Initiatives are based on the efforts of individuals, with no guarantee of continuity when there is a change of government.
- Entrepreneurship is not part of the vocational curriculum. Ministries of Education do not endorse such education (even though Ministries of Economy/Industry and others have made entrepreneurship a priority). There is no recognition of entrepreneurship education, and no cooperation with relevant partners (such as business associations and NGOs).
- The purpose of VET studies is sometimes seen as being only to provide workers with technical skills, without developing generally applicable, interpersonal and entrepreneurial skills.
- There is not enough cooperation between stakeholders at regional level.
- There are legislative or bureaucratic barriers to making such programmes widely available (for instance, related to the taxation of student mini-compan

Support for Higher Education Institutions :

- Coordination is lacking, because there is no single support structure and financial resources are fragmented.
- Funds and resources either are lacking or lack continuity.
- Information is poorly disseminated to schools.
- Institutional cooperation between the formal education system and the labour market is weak.

Obstacles and risks to Higher Education Institutions and educators:

- Support from the school management and local community is lacking.
- Teachers and the school management are reluctant to introduce entrepreneurship programmes.
- Entrepreneurship programmes are confused with management programmes.
- The teacher does not succeed in making entrepreneurship education relevant to the students.
- Teachers lack competence and knowledge. Some teachers' knowledge is only theoretical. As a result, the programme is too theoretical (academic). Theoretical knowledge is stressed rather than developing entrepreneurial skills.
- Teachers are not trained in entrepreneurship education.
- Career guidance and counseling is weak.
- The learning environment is not entrepreneurial.
- It is difficult to measure the outcome of entrepreneurship education, and experience in measuring and assessing results is lacking.
- The school environment is isolated and lacks links to local entrepreneurs.
- Entrepreneurship is a separate field or course, and is not otherwise linked to or interwoven in vocational education and training.
- Entrepreneurship is seen merely as a course that ends with a grade rather than a permanent way of thinking or attitude.
- Time (and staff) commitment is lacking and there is increasing competition with other activities.
- Business people are not available as volunteers: it requires a lot of resources to recruit train and support a large number of volunteers; furthermore, in today's environment, corporate volunteering may become less prevalent.

Entrepreneurship programmes and activities differ greatly in intensity and effectiveness. There is in general a perception that there are gaps to be filled. Some reasons for the gaps identified are as follows;

- a) Entrepreneurship is not included in all parts of the higher education institution's programmes and curriculum;
- b) Student's participation is limited;
- c) Teaching methods are ineffective;
- d) The practical elements of entrepreneurship is missing;
- e) Educators are not well trained and they are not fully competent;
- f) Entrepreneurship is not well linked to specific training subjects or profession;

- g) Business people and existing business owners are not rightly involved in imparting entrepreneurship.

4. Conclusive Remarks and Recommendations

Entrepreneurship education is a carefully planned process that leads to the acquisition of entrepreneurial capacities and competencies. It seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in notable gamut of ventures. Higher Education Institution's graduates are expected to be prepared for teaching and self - employment. Thus entrepreneurship education needs to be promoted within the Higher Education Institution 's programme. Considering the imperatives and expediency of entrepreneurship education, the following recommendations are made:

- More Higher Education Institutions should be made to run entrepreneurship education as a discipline like Accountancy, sociology, psychology etc. This will solve the problem of inadequate qualified staff to teaching the course in our institutions of higher teaming in Nigeria.
- There should be synergy and cooperation between Higher Education Institutions and enterprises although good results very often depend on the individual initiative of authorities and facilitators.
- One of the main difficulties is involving small and micro-enterprises in higher education institution's activities. Small companies do not have sufficient time to dedicate to work placements of students in the company or do not see any benefit in cooperating with schools.
- There is need to provide opportunities for youths to raise funds to enable them start up and expand their business enterprise in a manner that will be significant to them. This may be achieved through bursary awards and other such in school assistance to enable youths acquire savings before they are out of school or through grants to them on graduation.
- The government should mandate financial institutions like commercial banks to produce and issue more age-friendly loans. Such loans would have low interest rates and long duration for repayments.

- Youths should be exposed to training in technology (especially new discoveries) from time to time. This keeps them in tune with trends of the technological world and thus avoids drudgery in their business.
- There should be efforts to reinforce in youths the concept of risk taking and patience in wealth creation. This instills positive change of entrepreneurial attitude. They would thus develop habit of success out of failure which is the only way to making money in the long run.
- Government and Non governmental agencies should provide enabling environment and such environment be sustained for assurance. Such 'as infrastructural facilities, water supply, modern information technology (ICT) among others.
- The fight against corruption and indiscipline should be continued with vigor at all levels and sectors.
- Effective supervision and evaluation of programme implementation and funding must be ensured on a continuous basis.
- Students Industrial work experience scheme (SIWES) should be enhanced and made more effective.

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ENTREPRENEURSHIP EDUCATION: CHALLENGES AND IMPLICATIONS FOR EDUCATORS IN HIGHER EDUCATION INSTITUTIONS

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Abstract

The Nigerian government seems to have woken up to the reality that the country needs to break away from the vicious cycle of poverty, infrastructural neglect, corruption and other social problems. The recent challenges in world economy has stimulated awareness for the expediency of Entrepreneurship Education. Thus, emphasis appears to be shifted to Entrepreneurship Education. The truism that potential entrepreneurs need to be identified, trained and motivated to start their own industry units cannot be over emphasised. The incorporation of entrepreneurship education programmes in Higher Education Institutions curriculum will equip students with entrepreneurial skills that will enable them create and develop enterprises in the notable gamut of business ventures. This will in turn engender self reliance, job creation and reduce unemployment. These institutions are into the identification, selection and training of potential entrepreneurs.

Keywords: Entrepreneurship, Entrepreneurship Education, Educators, Higher Education Institution

1. INTRODUCTION

Entrepreneurship education, in its various forms, can equip people to pragmatically explore and proactively pursue business opportunities available to them. We have seen a number of “waves” in entrepreneurship education, starting a century developing in phases and now expanding exponentially. By making entrepreneurship education available to undergraduates, we are preparing the next wave of entrepreneurs to enable them to lead and shape our institutions, businesses and the economy. Entrepreneurial programmes and modules offer students the tools to think creatively, to be an effective problem solver, to analyse a business idea objectively and to communicate, network, lead, and evaluate any given project. Students feel more confident about setting up their own businesses if they can test their ideas in an educational, supportive environment. However, the benefits of entrepreneurship education are not limited to boosting start-ups, innovative ventures and new jobs. Entrepreneurship is a competence for everyone, helping undergraduates and youths alike to be more creative and self-confident in whatever they undertake. This paper seeks to raise awareness about the importance of entrepreneurship education for developing the skills to solve global challenges, increase understanding about current approaches, build acceptance of entrepreneurship’s rightful role in education and provide a platform for action to take the necessary next steps for mainstreaming entrepreneurship in education. It must however be noted that high-level policy-makers and leaders from the private and academic sectors should synergise and develop high-impact solutions through multi-stakeholder partnerships for embedding entrepreneurship education within their countries and regions. Entrepreneurship is a global phenomenon. The future, to an even greater degree than the past, will be driven by innovation and entrepreneurship. It is time to more adequately develop entrepreneurial skills, attitudes and behaviours in our higher education institutions. Considering what to learn refers to the substance of entrepreneurship education, that is the whole phenomenon of some its part or aspects, including the process itself and considering how to learn refers to the behavioural aspect of the actor the entrepreneurship through entrepreneur and his or her experiences, that is, the actor learn about the entrepreneurship through entrepreneurial process. Thus, this publication can rightly assert that the key dimensions of entrepreneurship education refer to what to learn and how to learn, and the quality of the three element relate to the phenomena the field of entrepreneurship studies is gathered around. These focus on such phenomena as opportunity recognition, new venture creation, risk and acquisition, and allocation of resource in order to make thing happen in different contexts, levels and perspectives.

2. Conceptual Framework

Entrepreneurship education refers to education and teaching given both in school and in the surrounding society. Entrepreneurship education as a concept means growing into entrepreneurship which in turn here means both external and internal entrepreneurship. Entrepreneurship education equips people with *the ability to seek* investment opportunities. Through entrepreneurship education, success habits are imparted as the individuals develop entrepreneurial integrity, it ensures that skills, ideas, attitudes, etc, are

utilized to create employment for self and others. In Nigeria and the whole world at large entrepreneurship is being seen as a key to economic and developmental process. When people are exposed to entrepreneurship, it is evident that they would be opened to opportunities that will enable them to become creative and productive. This will enhance job creation and improve the standard of living of an individual in the society. Often, it creates new job for others at the same time. Entrepreneurship education training could be given to interested individuals both adults and students through workshops, classes, and conferences thereby learning basic ideas of starting their own businesses and keeping it naming. Entrepreneurial education is a specialized training given to students of vocational and technical education to acquire the skills, ideas and managerial abilities and capacities for self-employment rather than being employed for p The quality of input influences to a large extent the quality of output In other words, the quality of the input of entrepreneurship education such as teachers, students and infrastructural facilities will influence greatly, the input of the output (Olormmiolu, 2010). Entrepreneurship education seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of setting. At the tertiary level of education entrepreneurship education is perceived not only as a career opportunity but as a way of upgrading a young person's abilities to succeed as an employee as well as an entrepreneur. The implication therefore is that the overall purpose of entrepreneurship education is the development of expertise as an entrepreneur. It is the process of providing individuals with the ability to recognize business opportunities, the insight, the zeal, the knowledge, the courage and skills to act on them. Entrepreneurship education as part of the total educational system is the type of education that involves the acquisition of skills, ideas and management abilities necessary for job creation. Bechard and Toulouse, (1998) defines it as a collection of formalized teachings that informs, trains, and educates anyone interested in business creation or small business development. It also means different things at different levels of education. In this paper, it was therefore agreed that existing activities and programmes qualify as education for entrepreneurship if they include at least two of the following elements:

- a) Developing those personal attributes and generally applicable (horizontal) skills that form the basis of an entrepreneurial mindset and behaviour;
- b) Raising students' awareness of self-employment and entrepreneurship as possible career options;
- c) Work on practical enterprise projects and activities, for instance students running minicompanies;
- d) Providing specific business skills and knowledge of how to start and successfully run a company.

The Higher Education Institution's curriculum and programmes should be designed to, among other goals:

- ✓ Produce highly motivated, conscientious and efficient classroom teachers for all levels of the Nigerian educational system and,
- ✓ Provide graduates with the intellectual and professional background adequate for their assignment and make them adaptable to changing situations (Federal Republic of Nigeria, 2004).

- ✓ Developing those personal attributes and generally applicable (horizontal) skills that form the basis of an entrepreneurial mindset and behaviour;
- ✓ Raising students' awareness of self-employment and entrepreneurship as possible career options;
- ✓ Work on practical enterprise projects and activities, for instance students running mini-companies;
- ✓ Providing specific business skills and knowledge of how to start and successfully run an enterprise or company.

3. Literature Review

In the words of Dirk Meyer, President and CEO, AMD “ Education is the clearest path to individual opportunity and societal growth, and entrepreneurship education is especially vital to fuelling a more robust global economy. *Entrepreneurship is the ability to create and build something from practically nothing. It is initiating, doing, achieving and building an enterprise or organization, rather than just watching, analyzing, or describing one.* Entrepreneurship refers to an individual's ability to turn ideas into action. It covers creativity, innovation and risk taking, and the ability to plan and manage projects in order to achieve objectives. Entrepreneurship education means different things to different educators. Kourilsky, (1995) defines entrepreneurship education as opportunity, recognition, marshalling of resources in the presence of risk and building a business venture. Often, it creates new job for others at the same time. Entrepreneurship education training could be given to interested individuals both adults and students through workshops, classes, and conferences thereby learning basic ideas of starting their own businesses and keeping it naming. Entrepreneurial education is a specialized training given to students of vocational and technical education to acquire the skills, ideas and managerial abilities and capacities for self-employment rather than being employed for p The quality of input influences to a large extent the quality of output In other words, the quality of the input of entrepreneurship education such as teachers, students and infrastructural facilities will influence greatly, the input of the output (Olormmiolu, 2010). Entrepreneurship education seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of setting. Entrepreneurship education equips people with *the ability to seek* investment opportunities. Through entrepreneurship education, success habits are imparted as the individuals develop entrepreneurial integrity. it ensures that skills, ideas, attitudes, etc, are utilized to create employment for self and others. In Nigeria and the whole world at large entrepreneurship is being seen as a key to economic and developmental process.

When people are exposed to entrepreneurship, it is evident that they would be opened to opportunities that will enable them to become creative and productive. This will enhance job creation and improve the standard of living of an individual in the society. An entrepreneur promotes employment rather than seeking for an employment. Therefore, there is a need to embrace this type of education and provide all the necessary resources needed to make functional. Entrepreneurship Education seeks to provide student (especially those in higher education institutions) with the knowledge, skills and motivation to encourage entrepreneurial studies in a variety of setting (European Union Commission, 2010). The commission emphasizes that different aspects of entrepreneurship education are offered at all levels of

schooling from primary or secondary schools through - graduate university programmes. The growth of entrepreneurship as a recognized profession in the United States was visible in the 1990s. In that professional approach lies the secret benefit of entrepreneurship education, which is, to help decrease the chances of failure by stressing a consistent and proven set of practices. In modern entrepreneurship, the idea of professionalizing the process of entrepreneurship is another great commonality. Emeraton (2008) described entrepreneurship education as that which deals with those attitudes and skills that are necessary for the individual to respond to his environment in the process of conserving, starting and managing a business enterprise. They opined that their opinion is based on the fact that some basic attitudes and skills are essential for an individual to respond positively to his environment and explore its potentials. This implies that entrepreneurship education prepares the individual to be properly equipped to acquire saleable skills which could be used to manage his own business or that of other persons (Oduwaiye, 2005). Entrepreneurship education should not be confused with general business or economic studies, as its goal is to promote creativity, innovation and self-employment. Education is said to be qualitative when the input such as students, teachers, finance, facilities and equipment and all these are converted through teaching and learning (theory and practical) and produce a desirable output. The output is better equipped to serve themselves and the society. Entrepreneurship education seeks to prepare people particularly the youths: to be responsible, enterprising individual who became entrepreneurs or entrepreneurial thinkers by immersing them in real life learning experience whereby they can take risks, manage result and learn from the outcome (Suleiman2010). Entrepreneurship education is teaching people that they can either take or create a job. This will enable them to be self-employed and not relying on other job security. Entrepreneurship education is an indispensable ingredient for job creation. Sanda (2010) asserted that Nigeria and other countries of the world are seeking to increase the entrepreneurship capacities of their citizens with the understanding that it will contribute to economic growth and development. Therefore, there is a need for qualitative entrepreneurship education if the recipient is to acquire appropriate knowledge, attitude, abilities and skills that would make them to be job creators instead of job seekers. Addressing entrepreneurship education requires working with existing education systems to inject the necessary changes as well as launching new initiatives outside of current structures. Entrepreneurship education can be a societal change agent, a great enabler in all sectors.

Didactics of Entrepreneurship Education

The study of teaching is called didactics. Didactics concentrates around planning and the actual teaching: it studies the aims of teaching, the teaching process, and the results. In addition, it aims at developing a theory of good teaching. Thus an important function of entrepreneurship education is to provide the learners with relevant simulation models of entrepreneurship and, at the same time, to support the internal entrepreneurship, activity, creative, and initiative of the included in the didactics of entrepreneurship education, Some general didactics goals of entrepreneurship education are presented in the following:

- The learner understands the meaning of entrepreneurship as a part of the prosperity of national economy

- Understands the controversy between nature and prosperity in entrepreneurship
- Understand the meaning of sustainable development and the importance of tolerating uncertainty in entrepreneurship and society
- Receives information on the vocation of an entrepreneur
- Acquires the knowledge and skills relevant for choosing a career and further education suitable for them later in life

Pedagogy of Entrepreneurship Education

In terms of entrepreneurship education's pedagogy, it can be argued that currently it will be minimal issue of whether entrepreneurship can be taught or not, since it was proven it can (Henry, et al, 2005; D.F. Kuratko, 2005). However there are pressing issues involving pedagogy; (1) How should the academician teach entrepreneurship?

(2) Does the conventional business style works in exposing students to entrepreneurship?

(3) How the perception of academicians regarding the nature of entrepreneurship can influence their pedagogy style?

In the first issue, earlier on, Davies and Gibb (1991) argued that adoption of traditional education method which focus mainly on theory and didactic approach were not significant in teaching entrepreneurship. Gibb (2007) cautioned that in most entrepreneurship educations, it seems like the dominant teaching methods are lectures, cases, projects and entrepreneur/stakeholder presentations, which may or may not be delivered in a manner designed to stimulate entrepreneurial behavior; these teaching methods can be anti-entrepreneurial mode because usually it was delivered in the confinement of classroom (Shepherd & Douglas, 1996). Earlier, Gibb (1993), classified what are the major differences between business school learning focus and entrepreneurship education/learning focus (Refer Table 1.2 below). Later, according to Hisrich and Peters (1998) there are three components of skills to be cover in entrepreneurship education pedagogical aspects namely technical, business management and personal entrepreneurial skills.

Meanwhile, in relation to second issue, most entrepreneurship courses are focused upon business and business concepts. According to Gibb (2005; 2007), the concepts are hard to resist that even when they are applied to non-business situations.

The following strategies for the attainment of the goal for the integration of entrepreneurship education in both in Higher Education Institutions are expedient:

- a. The first and most important step would involve state and school authorities adoption of a formal Entrepreneurship Education curriculum. This curriculum could be adopted "off the shelf" from existing 'best practice' products, or developed in-house.

- b. As the curriculum is introduced into the schools, a commitment to professional development opportunities for teachers will also be required. Many teachers will be new to the world of entrepreneurship and require training in how to support these new courses.
- c. Effective Entrepreneurship Education uses a host of new teaching enablers and techniques, such as distance education, experiential learning, problem-based learning, the planning of specific objectives, learning experiences, organization and integration of the learning experiences, instructional methods and facilities and evaluation techniques for assessing the attainment of specific objectives (Lemhi and Anyakoha, 2006).
- d. Specific objectives are of utmost importance to curriculum development and implementation as they are particularly helpful guides in selecting learning experiences, guiding learning, selecting instructional materials and also evaluation techniques (Lemchi and Anyakoha, 2006; and Nwanchukwus 1990). The objectives of entrepreneurship education within Higher Education Institutions. borders on the thirty - nine specific objectives postulated by Lemchi and Anyakoha, (2006) as enshrined in Higher Education Institution's curriculum. The content of entrepreneurship education in Higher Education Institutions should hinge on the specific objectives. This content should include, among others, business ownership, entrepreneurial responsibilities, product development, record/book keeping and market segmentation (Fayolle 2005).
- e. Facilities and methods of teaching entrepreneurship education should be suited to the objectives. Hindle (2007) noted that there is no universal method of teaching entrepreneurship education. The choice depends mainly on the objectives, contents and constraints imposed by the Institutional context. However, methods such as demonstration, practice and drill, inquiry methods are suggested for the teaching of entrepreneurship education in Higher Education Institutions. Facilities available will go a long way to determine the methods of teaching entrepreneurship education in Higher Education Institutions. The Minimum Standard stipulated by the National Universities Commission (NUC), National Board for Technical Education (NBTE) etc, needs to be adhered to by polytechnics throughout the federation. This will enhance the effective implementation of the curriculum, thus equipping the student entrepreneurship graduates with skills required to explore and excel.
- f. Evaluation of entrepreneurship education is another important aspect of the teaching process.

Strategies for Addressing the Challenges and Enhancing the Teaching of Entrepreneurship Education

In order to promote entrepreneurship knowledge, attitudes and skills that can be taught within higher education institutions, the following strategies can be employed:

- a) Provide small business schools where interested students and community members can participate.

- b) Develop entrepreneur internship programmes matching students with locally successful entrepreneurs with clearly established education programmes.
- c) Establishing an enterprise college aimed at fostering the specific skill sets required for entrepreneurship to serve as skill acquisition centers for the youths.
- d) Creating an economic friendly political environment.
- e) Improving on the government taxation on small scale businesses.
- f) *Innovation*: Innovation is change that creates a new dimension of performance. It is creative idea that is realized. Lucke and Katz (2003) note that Lucke innovation is the combination or synthesis of knowledge in original, relevant, valued new products, processes or services. Innovation typically, involves creativity but is not identical to it (Kaka and Agwa, 2007) higher education institution's educators need to provide an entrepreneurship education that will stimulate knowledge, skills and attitudes of the National and higher national diploma students so that they can be more innovative.

This will enable them introduce new ideas into the economy, formulate new goals, initiate new methods of production, new methods of distribution or carry out new organization of an industry (Gula and Ewubare, 2007).

- g) Train the Trainers: Teachers should be given opportunity for in-service training so that they can brace up with the changes in the curriculum. The training educators gives room for professional growth which in turn enhances creativity and productivity. The training of educators should be structured towards developing the specific skills required to teach entrepreneurship, The suggested skills are:

- i. *Project management skills*

The heart of entrepreneurship education is students setting up and running a project. Teachers require the skills to support students throughout this process, which includes: planning and preparing the project (setting objectives and identifying what exactly is required and how it can be carried out, etc.); anticipating students' needs at each stage of the project; setting personal targets and goals throughout the project; and doing the final evaluation.

- ii. *Pedagogical skills*

The emphasis is on pedagogies that encourage learning: by doing; by exchange; by experiment; by risk taking and 'positive' mistake making; by creative problem solving; by feedback through social interaction; by dramatizing and acting the part; by exploring role models; and by interacting with the outside/adult world.

This involves the teacher in suggesting and guiding rather than giving instruction, asking open questions that do not necessarily lead to one correct answer, learning alongside the students, helping to resolve conflicts and difficulties that may arise and persuading students to face up to things they may

initially resist or avoid.

iii. Personal skills

Much of the success of the facilitation process depends upon a range of communication skills, including that of active listening, the ability to negotiate and work in teams with other colleagues and the ability to create a learning environment in which students can be open and frank, and feel confident and secure. The most effective way to ensure that teacher competence in this field is adequate and up-to-date would be to make entrepreneurship a mandatory part of teacher education. It is also important to offer further education to those teachers who have already completed their initial education.

- h) *Research: This is* another strategy for addressing the challenges of the teaching of entrepreneurship education. For instance, the issue of entrepreneurship education emerged as a result of research. DSAdegbenro ICT Polytechnic's management should endeavour to provide recent textbooks for teachers of this programme. Teachers should update themselves through research, seminars, workshops and conferences. This will also help to improve their competencies.
- i) *Entrepreneurship enablers/ Enhancement of teaching facilities and techniques:* Anyakoha (2001) stressed the need to be willing to learn and use new technologies and improve on old methods and techniques of teaching.

The educators should explore new techniques / methods of teaching the entrepreneurship courses so that the students can cope with the dynamic society at graduation. For instance, they should carry out entrepreneurial practice in various areas under the supervision of their lecturers.

- j) *Improved school industry relationship:* The polytechnic and other industries and organisations in their precinct should have an improved working relationship, which should enhance students' skill acquisition. When students are sent out on industrial attachment, the polytechnic should give them the necessary orientation needed to have a good rapport with the industry. Apprenticeship training could be seen as a good model for cooperation on different levels: company trainers meet teachers to discuss the specific situation of apprentices, and companies negotiate with schools to ensure coherence between the company training and the school curriculum. In addition to regular placement periods in a company, formalized partnerships between the higher education institutions and the company seem to be an efficient way of cooperating on developing an entrepreneurial mindset among students, to the benefit of all parties.

Partnerships may contain many different elements, all aimed at facilitating and increasing cooperation which may contribute - not just indirectly but directly - to developing the student's entrepreneurial competence. Such partnerships may, for instance, involve the following:

- i. The enterprise delivers real-life, practice-related problems for use in student assignments and projects.

- ii. The enterprise ensures that the student gets an insight into the sector and into its own operations by visiting the company, shadowing a manager, taking part in exhibitions, etc.

A concrete example of a close partnership can be seen in a situation where students conclude their education by carrying out a practical project in enterprise on which the enterprise and the school cooperate. Taking a real problem as the point of departure, the student can demonstrate his/her entrepreneurial skills and creative thinking by coming up with a solution or a product that meets the enterprise's needs. Before starting, the student drafts a project description which must be approved jointly by the enterprise and the school. This case-based final exam can be taken individually or in groups. Despite the interest and goodwill of many teachers and entrepreneurs in engaging in cooperation activities, there are still a number of obstacles to be overcome, such as:

- The large number of different tasks to be performed by staff of very small companies, leaving little time for involvement with schools;
- The lack of mutual knowledge and understanding of each other's priorities and what each party is involved in on a day-to-day basis;
- A possible lack of trust as a result of the above;
- The differences in working times / hours of working;
- The absence of a main point of contact in the school.
- In some cases another obstacle is that teachers are not allowed to work in other outside school.
- Teachers should be allowed flexible periods of training in companies.

There are several ways of evaluating the quality and the results of entrepreneurship programmes and activities in higher education institutions among which are: -

- By collecting feedback from students who participated in the programme and from other stakeholders;
- By taking impact measurements, e.g. measuring entrepreneurial competences and entrepreneurial intentions before and after participation in the programme.
- The long-term impact can also be assessed, for instance by measuring how many students who participated in entrepreneurship programmes or activities have become entrepreneurs later. However, starting up a company is only one in a range of possible outcomes of entrepreneurship education; therefore long-term impact assessment could also consider other indicators such as entrepreneurial activities within a company (*'entrepreneurship'*) or the quality and level of employment.
- In fact, what is needed is coordination of research linking short-term evaluations of what individuals experience in schools, medium-term measures of how attitudes and intentions change and long-term assessments of the quality and level of employment and of the net result on business start-up and survival rates.

Evaluation of the quality of programmes and activities should include internal procedures and self-assessment, and external and independent auditing, and could measure:

- General entrepreneurial abilities: creativity, capability with regard to putting forward innovative ideas, curiosity, ability to work in a team, self-confidence, leadership, proactiveness of approach, willingness to take risks, problem-solving skills, responsibility, etc.
- Specific entrepreneurial competences: the knowledge and skills to understand what must be done in order to set up and run a new business; the capacity to draft a good business plan; the ability to identify opportunities; an insight into production methods, knowledge of finance, etc.
- Attitudes: how many students consider self-employment as a career option? Such abilities, competences and attitudes should preferably be measured both before and after students' participation in the programme. This can be done by means of:
 - Assessment;
 - Interviews;
 - Group evaluation and focus evaluation questionnaires;
 - Tests and simulation games, etc.

The self-assessment should be carried out by three groups: students, lectures and the Higher Education Institution's management, in order to determine the three groups' satisfaction with the experience. The perception of industry and employers - especially those involved in the programme - should also be taken into account.

- Programmes and activities should be evaluated regularly as part of the programme, rather than as a one-off exercise. The outcome of the evaluation (lessons learned) should be embedded in the next round of activities.
- One way of assessing the long-term impact would be to find out how many students who participated in entrepreneurship programmes or activities have become entrepreneurs 5 or 10 years later.
- This would entail either sending questionnaires to former students of entrepreneurship programmes to assess whether they have started their own company (or whether they are employed but use the entrepreneurial skills acquired), or getting feedback on a regular basis from alumni-entrepreneurs through close cooperation with them. The number of alumni-entrepreneurs could be a good indicator, if a database allows such information to be obtained objectively. However, in most cases this information is currently collected at the initiative of schools through personal contact.

There are still other challenges to be overcome in assessing the effect of entrepreneurship education programmes and activities at higher education institutions in terms of new business creation. These relate to:

- the wide variety of objectives and methods of delivery of entrepreneurship education;

- the difficulty in isolating the effects of entrepreneurship education programmes from other educational attainments and from all other factors (economic, administrative, etc.) that influence entrepreneurship and business creation at national or regional level;
- the long chain from intervention to intended outcomes, when trying to link student participation in entrepreneurship education in secondary school to being more likely to run a business at age 25 or 30.

Critical Success Factors of Entrepreneurship Education in Higher Education Institutions

The following are the set of key performance indicators for effectiveness and success in teaching entrepreneurship:

- 1) The programme or activity must have well-defined objectives and appropriate measures of success. It is regularly evaluated, and receives positive feedback from students. Evaluation results are continuously fed into the development process.
- 2) There is a good balance between theory and practice: the programme or activity is action oriented, based on experience and project work. It aims to improve the students' abilities to work in a team, develop and use networks, solve problems, and spot opportunities. Students are actively involved in the learning process, and responsible for their own education.
- 3) The programme or activity must be adapted to the students' learning environment and to their specific fields of study.
- 4) The institution must have external links with enterprises, experienced business people and young entrepreneurs, and with the local community. Entrepreneurs are involved in the learning process.
- 5) Students must be exposed to real-life work situations and encouraged to take part in extracurricular activities. External events, activities and contests are organized.
- 6) Educators must have an appropriate qualification and training (both local and international) in entrepreneurship (through experience in business and/or participation in training). They must use up-to-date study materials and up-to date knowledge.
- 7) The programme or activity must be structured towards stimulating students and educators to look beyond the borders of their school environment (e.g. by exchanging experience or ideas with other schools, with students from other countries or with other technical backgrounds).
- 8) The programme or activity is part of a wider scheme: students are monitored after participation in the programme, and are referred to the right support mechanisms if they want to start up a business.

This list does not include external factors, i.e. the overall environment in which programmes and activities take place, such as support from public authorities.

Vitiating Elements of Entrepreneurship Education

In the following list, the risks and obstacles are divided into three broad categories, showing the levels at which action needs to be taken notably:

Policy framework:

- There is no dialogue and cooperation between different departments in the public
- Administration that should be responsible for entrepreneurship education policies and actions.
- There is no national strategy or plan to implement entrepreneurship education that includes all stakeholders (public and private), so students cannot choose such training as of right.
- There is no legitimate and coherent institutional system. Initiatives are based on the efforts of individuals, with no guarantee of continuity when there is a change of government.
- Entrepreneurship is not part of the vocational curriculum. Ministries of Education do not endorse such education (even though Ministries of Economy/Industry and others have made entrepreneurship a priority). There is no recognition of entrepreneurship education, and no cooperation with relevant partners (such as business associations and NGOs).
- The purpose of VET studies is sometimes seen as being only to provide workers with technical skills, without developing generally applicable, interpersonal and entrepreneurial skills.
- There is not enough cooperation between stakeholders at regional level.
- There are legislative or bureaucratic barriers to making such programmes widely available (for instance, related to the taxation of student mini-compan

Support for Higher Education Institutions :

- Coordination is lacking, because there is no single support structure and financial resources are fragmented.
- Funds and resources either are lacking or lack continuity.
- Information is poorly disseminated to schools.
- Institutional cooperation between the formal education system and the labour market is weak.

Obstacles and risks to Higher Education Institutions and educators:

- Support from the school management and local community is lacking.
- Teachers and the school management are reluctant to introduce entrepreneurship programmes.
- Entrepreneurship programmes are confused with management programmes.
- The teacher does not succeed in making entrepreneurship education relevant to the students.

- Teachers lack competence and knowledge. Some teachers' knowledge is only theoretical. As a result, the programme is too theoretical (academic). Theoretical knowledge is stressed rather than developing entrepreneurial skills.
- Teachers are not trained in entrepreneurship education.
- Career guidance and counseling is weak.
- The learning environment is not entrepreneurial.
- It is difficult to measure the outcome of entrepreneurship education, and experience in measuring and assessing results is lacking.
- The school environment is isolated and lacks links to local entrepreneurs.
- Entrepreneurship is a separate field or course, and is not otherwise linked to or interwoven in vocational education and training.
- Entrepreneurship is seen merely as a course that ends with a grade rather than a permanent way of thinking or attitude.
- Time (and staff) commitment is lacking and there is increasing competition with other activities.
- Business people are not available as volunteers: it requires a lot of resources to recruit train and support a large number of volunteers; furthermore, in today's environment, corporate volunteering may become less prevalent.

Entrepreneurship programmes and activities differ greatly in intensity and effectiveness. There is in general a perception that there are gaps to be filled. Some reasons for the gaps identified are as follows;

- h) Entrepreneurship is not included in all parts of the higher education institution's programmes and curriculum;
- i) Student's participation is limited;
- j) Teaching methods are ineffective;
- k) The practical elements of entrepreneurship is missing;
- l) Educators are not well trained and they are not fully competent;
- m) Entrepreneurship is not well linked to specific training subjects or profession;
- n) Business people and existing business owners are not rightly involved in imparting entrepreneurship.

4. Conclusive Remarks and Recommendations

The availability of qualitative entrepreneurship education is a sine qua non for the rapid development and transformation of any nation's economy. The world is developing at an unprecedented pace and the rate of entrepreneurial skill gaps and unemployment is growing fast. Government should be seized by passion to

make things happen positively to engender entrepreneurial success. Adequate funding should be given to entrepreneurship because it is what can bring about sustainable development in the country if Nigeria is to achieve the Millennium Development Goals by 2015 as well as become one of the world's biggest economies in the world by the year 2020, her entrepreneurship sector must receive adequate fund. The traditional education is less expensive and the vocations of the family will not go into extinction. Entrepreneurship Education differs from other business or economics education programs, and can complement most financial literacy curricula. These programs teach youth how the economy works and how to manage one's own finances. Entrepreneurship educators can and should provide this economic and financial foundation, and they also provide a much broader range of skill sets and teach young people. Entrepreneurship education helps students build more successful careers regardless of whether they take the "entrepreneurial leap" or become a "intrepreneurial worker" in someone else's business. The entrepreneurial "mindset" improves the productivity of all workers so everyone wins. In today's economy, successful careers require networking and flexibility that can be learned as students experience entrepreneurship education. The ability to promote the "brand called me" is becoming an even more important skill as the economy is more and more relying on contractors and consultants to perform the work organizations need to complete. Students can acquire these types of fundamental techniques which are critical component of an effective future worker in the workplaces of the world through entrepreneurship education. A personal "locus of control" helps students engage more effectively in their education experiences thus improving academic performance while in the education system. Entrepreneurship education allows students the opportunity to develop skills essential for success in the market places of the 21st Century. The following recommendations are made:

- Higher Education Institution's entrepreneurship lecturers should be pragmatic, innovative and committed to the teaching of entrepreneurship education.
- Opportunities for in-service training on entrepreneurship education both local and international should be given to lecturers by the government
- Government should provide adequate fund for the provision of adequate facilities and equipment for ion institutions.
- Government should provide sufficient grants for research while the educators should explore ways of obtaining such research grants.
- Streamlines entrepreneurship education curriculum along the lines of practical skills acquisition in tandem with up to date technological innovation in the world of business.
- All institutions of higher learning offering entrepreneurship education should be mandated to establish Entrepreneurship Education Centre. This Centre should be equipped with all the modern facilities which could enrich the students with both theoretical and practical skills acquisition.

- There is need to provide opportunities for youths to raise funds to enable them start up and expand their business enterprise in a manner that will be significant to them. This may be achieved through bursary awards and other such in school assistance to enable youths acquire savings before they are out of school or through grants to them on graduation.
- The government should mandate financial institutions like commercial banks to produce and issue more age-friendly loans. Such loans would have low interest rates and long duration for repayments.
- Youths should be exposed to training in technology (especially new discoveries) from time to time. This keeps them in tune with trends of the technological world and thus avoids drudgery in their business.
- There should be efforts to reinforce in youths the concept of risk taking and patience in wealth creation. This instills positive change of entrepreneurial attitude. They would thus develop habit of success out of failure which is the only way to making money in the long run.
- Students Industrial work experience scheme (SIWES) should be enhanced and made more effective.
- Government and Non governmental agencies should provide enabling environment and such environment be sustained for assurance. Such 'as infrastructural facilities, water supply, modern information technology (ICT) among others.
- The fight against corruption and indiscipline should be continued with vigor at all levels and sectors.
- Effective supervision and evaluation of programme implementation and funding must be ensured on a continuous basis.
- Emphasis must be on practical skills rather than on theoretical because the business world is dynamic and there is a need for constant change.

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