VOLUME 3 NUMBER 2 Nov 2011
ISSN 2076-9202 (Print)
ISSN 2218-046X (Online)

International Journal of Information, Business and Management

Elite Hall Publishing House

International Journal of Information, Business and Management

Publisher: Elite Hall Publishing House

Editor in Chief:

Dr. Muzaffar Ahmed (Bangladesh)
E-mail: muzaahme1@gmail.com

Managing Editor:

Dr. Jia Chi Tsou
Associate Professor, Department of Business Administration
China University of Technology, Taiwan
E-mail: jtsou.tw@yahoo.com.tw

Editorial Board:

Dr. Claudio De Stefano

Professor, Department of Computer Science

University of Cassino, Italy.

E-mail: destefano@unicas.it

Dr. Jen Ming Chen

Professor, Institute of Industrial Management

National Central University, Taiwan

E-mail: jmchen@mgt.ncu.edu.tw

Mr. Morteza Rasti Barzoki

Department of Industrial & Systems Engineering

Isfahan University of Technology, Iran

E-mail: m_rasti@in.iut.ac.ir

Mr. Mohsen Fathollah Bayati

Department of Industrial Engineering

Iran University of Science and Technology, Iran

E-mail: mfbayati@ind.iust.ac.ir

Dr. Edgardo Palza Vargas

Telfer School of Management

ISSN 2076-9202

University of Ottawa, Canada

Email: edgardo.palza-vargas.1@ens.etsmtl.ca

Mr. Solomon Markos

PhD Scholar, Andhra University, India

Lecturer, Department of Management, ArbaMinch University, Ethiopia

Email: solomonmarkos5@yahoo.com

Mr. Olu Ojo

Lecturer, Department of Business Administration

Osun State University, Nigeria

Email: oluojoe@yahoo.com

Dr. Mohammed-Aminu Sanda

Visiting Research Fellow, Lulea University of Technology, Sweden

Senior Lecturer, Department of Organization and Human Resource Management, University of Ghana, Ghana

Email: masanda@ug.edu.gh

Mr. Khalid Zaman

Assistant Professor, Department of Management Sciences

COMSATS Institute of Information Technology, Pakistan

Email: khalidzaman@ciit.net.pk

Dr. Kartinah Ayupp

Deputy Dean, Economics and Business

Universiti Malaysia Sarawak, Malaysia

Email: akartinah@feb.unimas.my

Dr. Malyadri. Pacha

Principal, Government Degree College

Affiliated to Osmania University, India

Email: drpm16@yahoo.co.in

ISSN 2076-9202

Dr. Arif Anjum

Managing Editor, International Journal of Management Studies

Email: infoijcms@gmail.com

Web: http://ijibm.site666.com/

ISSN 2076-9202 (Print)

ISSN 2218-046X (Online)

Investigating the predictability of sales and costs using financial statement items of companies listed on Tehran Stock Exchange

Azam Jari (Corresponding Author)
Islamic Azad University, Mobarakeh Branch, Department of Accounting, Isfahan, Iran.

Arezoo Aghaei Chadegani
Islamic Azad University, Mobarakeh Branch, Department of Accounting, Isfahan, Iran.

Abstract

The main purpose of business entities is earning income and the most important factor in survival of business entities is sales revenue. Thus, the forecasting of sales and costs of business entities become an important issue. The aim of this study is to investigate the ability of financial statement items in forecasting sales and costs of companies listed on Tehran Stock Exchange (TSE). To test the research hypotheses, 89 companies from five industries (auto and auto parts, food and drinks, metals, pharmaceutical and chemical) had been selected through cluster sampling. For analyzing and testing hypotheses, two regression models and panel data method were used. Research results show that forecasting sales and costs of companies listed on TSE is possible using financial statement items.

Keywords: *Forecasting Sales and Expenses, Tehran Stock Exchange, Cluster Sampling, Profit Organization*

1.Introduction

Accounting has a main role in providing information for users of financial statement. Accounting information should have special features to be used in the decision making process. According to the Financial Accounting Standards Board (FASB), one

of the goals of preparing financial statements is providing information for investors and creditors and other users for their investment decisions (Tabatabaie, 1999). A large proportion of accounting information is based on or derived from forecasts (Rieg, 2010). Useful information should help users to evaluate the results of past events and enable them to predict future happenings (Shabahang, 2006). In most developing countries disclosure of information such as expected sales, future cash flows and other predicting information are considered useful and relevant information for economic decision making. Therefore, investors can be successful in making decisions with regard to analysis of this information. According Concepts Statement No. 1 of Financial Accounting Standards Board; investors, creditors and other users tend to estimate the net future cash flows of the company but most of them try to predict the future profit of the firm. Regarding to this fact that one of the objectives of financial reporting is to provide the necessary information for the interpretation and evaluate the profitability of the company, analysts, managers of companies and the investors focused on the net income figure. Therefore, Net profit is one of the most important items of accounting information for interpreting of events (Khaleghi moghadam, 2004). Earning is obtained after reducing expenses from income (sales), so sales and costs are very important items and predicting sales and costs is important due to providing basis for forecasting profits. Regarding this argument, the aim of this research is investigating the capability of financial statement items in forecasting sales and expenses of companies listed on Tehran Stock Exchange. For testing the research hypotheses, financial statements' data of 89 companies has been used that they divided into five industries based on cluster sampling. For analyzing and testing hypotheses, two regression models and panel data method is used because it is very suitable technique for expansion estimation methods and provides theoretical results so researchers able to use time series and cross section data for verifying issues that the

ISSN 2076-9202

study of them is not possible in only sectional and time series environment (Moalemi, 2001).

This study attempts to extend the knowledge about forecasting of sales and costs to produce useful finding for both company and further researches. The originality of the paper related to using financial statements items for sales and costs forecasting in companies listed on Tehran Stock Exchange for the first time.

2.Literature review

2.1.Prior studies

Suwanvijit et al, (2011) believe that forecasting is about predicting the future as accurately as possible. Sales forecast is the amount of a product that the company actually expects to sell during a specific period. Anticipated sales volume is thus one of the main data needed to establish a business plan (Lippit, 1969). Hence, accurate sales forecasts are key information for managerial decisions and planning, as Kerkka¨nen et al. (2009) demonstrate in a case study (Rieg, 2010). There are a lot of researches that used different methods for predicting future sales and costs. Wu & Zhang (2004) compared the liner and non liner models in predicting retail sales. Linear models used in this study were time series methods and regression models and nonlinear models were neural networks. Research results show that non-linear models act better than the linear models in predicting the sample's sales and the regression models are an effective in sales forecasting.

Yang et al (2005) used Support Vector Regression model for predicting sales. In this research they used the past and present data of samples. The results of testing research hypotheses and comparing the proposed method with other methods have shown the benefits of the proposed model in this study.

Shahabuddin (2009) try to understand the behavior of the automotive industry which is very critical to avoid major economic disruptions in the economy. He mentioned that to understand this industry, one needs to understand its historical performance in relation to many economic factors that may affect the industry. Data about automobile sales (in dollars and in units) and many economic and demographic variables are collected from a variety of sources. Automobile sales are the dependent variable. However, the variable of automobile sales is divided into foreign and domestic car makers. The data are regressed using Statistical Package for the Social Sciences (SPSS) stepwise regression to obtain highly correlated variables. The results indicate a strong relationship between the economic variables and foreign car sales, but the relationship between the economic variables and domestic car sales is weak.

Rieg (2010) tested the hypothesis of improved forecasts over time. Indeed, this study was a case study of the accuracy of sales forecasting at a German car manufacturer. The paper analyzes original monthly sales plans and current data for three different car models in six different countries over 15 years and over several product life cycles (PLCs). Forecasting accuracy is calculated as one minus forecasting error. Forecasting error is measured with MAD/MEAN for periods of years or relative deviations per month. Additional interviews with managers were conducted to elicit details of internal forecasting organization and instruments. This study finds no evidence of increased forecasting accuracy in general over 15 years or over subsequent PLCs. This seems surprising, given improved statistical methods and software in general, and experience and learning effects of the organization itself. However, there is evidence from the case that the reason lays in environmental uncertainty and volatility and not in internal factors within the control of the company.

Suwanvijit et al (2011) developed a statistical model for long-term forecasting sparkling beverage sales in the 14 provinces of Southern Thailand. Data comprised

the series of monthly sales from January 2000 to December 2004 obtained from the company. They applied a classical Lee-Carter mortality forecasting approach as well as exponential smoothing Holt-Winters with additive seasonality method to log-transformed monthly sales containing season of month and branch location as factors. The model produced excellent estimates in sales predicting for up to 24 future months of 20 branches compared with actual data in each branch during the years 2005-2006. The model also gave more accurate results than using separate forecasting method whereas it was parsimonious in the number of parameters used.

Although traditional methodologies of sales forecasting such as auto-regression (AR), and integrated moving average model have been proven to be effective in many decision support applications, they still have certain shortcomings, and fail in an environment where the sales are more influenced by exogenous variables such as size, price, color, climatic data, effect of media, and price changes. Recently, more and more research efforts have been spent on exploring hybrid forecasting models such as a remarkable method based on clustering and decision trees analysis and some others. It is well-known that artificial intelligence (AI) models have more flexibility and can be used to estimate the non-linear relationship. Therefore, many researchers have applied AI models for forecasting problems (Choi et al 2011).

Choi et al (2011) use a hybrid SARIMA wavelet transform method for sales forecasting. They compared the performance of SW with (1) pure SARIMA, (2) a forecasting scheme based on linear extrapolation with seasonal adjustment (CSD+LESA), and (3) evolutionary neural networks (ENN). They illustrate the significance of SW and establish the conditions that SW outperforms pure SARIMA and CSD+LESA. They further study the time series features which influence the forecasting accuracy, and propose a method for conducting sales forecasting based on the features of the given sales time series. Experiments are conducted by using real

ISSN 2076-9202

sales data, hypothetical data, and publicly available data sets. They conclude that the proposed hybrid method is highly applicable for forecasting sales in the industry.

Although there are a lot of researches in forecasting sales through different methods but there is a gap in predicting sales and costs of companies using financial statements items that are useful information for users decision making. Thus, this research motivated to examine the capability of these items in predicting sales and costs.

2.2.Research hypotheses

Due to this fact that sales and costs forecasting is an important element for predicting earnings and also it is mentioned in primary purposes of accounting that investors and creditors emphasize on profit data reported in prediction future cash flow and also one of the qualitative features of information contained in financial reports is the predictive ability; therefore, the main research question is expressed as follows:

RQ: Whether the financial statement items have the capability of forecasting sales and costs of companies listed on TSE.

To answer the research question, two main hypotheses have been developed that were tested in the level of each industry and among whole companies listed on TSE. These hypotheses are:

H1: there is a relationship between net sales of next year with financial ratios of current year.

According to the theoretical foundations that can be used in sales forecasting, the first main hypothesis is tested in the form of following subsidiary hypotheses:

H1a: there is a relationship between the company's share (the net sales to average of net sales ratio) of this year and the next year net sales.

H1b: there is a relationship between operating profit margin ratio of this year and next year net sales.

ISSN 2076-9202

H1c: there is a relationship between inventory turnover ratio of this year and next year net sales.

H1d: there is a relationship between this year net debt ratio and next year net sales.

H1e: there is a relationship between return on assets ratio of this year and next year net sales.

The second main hypothesis is:

H2: there is a relationship between this year net sales and next year costs.

The second main hypothesis is tested in the form of following subsidiary hypotheses:

H2a: there is a relationship between this year net sales and next year operating costs.

H2b: there is a relationship between this year net sales and next year nonoperating costs.

3.Research method

The panel data method is used in this study because it is very suitable technique for expansion estimation methods and provides theoretical results so researchers able to use time series and cross section data for verifying issues that the study of them is not possible in only sectional and time series environment (Moalemi, 2001).

The regression model of panel data is:

$Y_{it}= \alpha+\beta x_{it}+u_{it}$ equation 1

In this equation i related to cross sectional aspects and t related to time aspects. u_{it} component has a normal distribution and all I and t items are independent from x_{it}. Thus, first it should be review whether heterogeneous or individual differences exist or not? If there is heterogeneous, panel data technique and otherwise ordinary least square method (OLS) will be used to estimate the model.

Panel Data method includes three types of estimating; Between Groups, Within Groups (Fixed Effect) and Random Effect. In between groups estimating regression is on averages and usually this method is used to estimate the long term Coefficients. In

ISSN 2076-9202

within group estimating time is not considered and only the individual effects are concerned. In random effect estimating it is assumed that the intercept has a common distribution with mean A and variance 2σ and unlike previous method are independent from explanatory variables of model. In this method the time factor is considered and the effects of individual units over time are included into the model as explanatory variables (Googerdchiyan, 2006).

To choose between panel data method and consolidated data F test is used:

$$F = \frac{(RRSS - URSS)/N - 1}{URSS/(NT - N - K)} \overset{H_0}{\sim} F_{N-1,N(T-1)-K}$$ Equation 2

Where:

RRSS: Restrict Residual Sum Squares

URSS: Unrestrict Residual Sum Squares

N: Number of Firms

T: Number of time observations

K: Number of estimated parameters

To decide about the use of fixed effects and random effects methods it should be noticed that the fixed effects approach is often efficient when the entire community is considered. If some samples are selected randomly from the community, the random effects method would be more efficient. For this purpose Hasman model is used:

$$w = (b_s \beta_s)'(M_1 - M_0)^{-1}(b_s - \beta_s)$$

Equation 3

Where:

W has a χ^2 distribution with K degree of freedom in which M_1 the covariance matrix for fixed effects model coefficients $\mathbf{b_s}$ and M_0 the covariance matrix for random effects model coefficients is β_S.

Using the theoretical literature and previous researches, in this study to test

hypotheses two regression models were used that will be described each of them as follows.

For analyzing data and testing the first hypothesis and its subsidiary hypotheses the regression model 4 is used:

$Sale_{i,\ t+1} = \alpha + \beta_1 FS_{i,t} + \beta_2\ OIM_{i,t} + \beta_3\ IT_{i,t} + \beta_4 DR_{i,t} + \beta_5 ROA_i$ equation 4

In this model the dependent variable is:

$Sale_{i,t+1}$: net sales of company I in year t+1

And independent variables are:

$FS_{i,t}$: firm share in year t

$OIM_{i,t}$: Operating Income Margin of company I in year t

$IT_{i,t}$: Inventory Turnover of company I in year t

$DR_{i,t}$: debt ratio of company I in year t

$ROA_{i,t}$: return on assets of company I in year t

The independent variables that are used in data analysis and testing first hypothesis have shown in table 1.

Table 1: Definition of independent variables in regression model 4

Independent variable	**Ratio**
Firm's share	Net sales to average sales of firms
Operating Income Margin	Operating income to net sales
Inventory Turnover	The cost of goods sold to average inventory
Debt Ratio	Total debt to total assets
Return On Assets	Net income to total assets

For analyzing data and testing the second hypothesis and its subsidiary hypotheses the regression model 5 is used:

$Cost_{i,t+1} = \alpha + \beta_0 Sale_{i,t}$ equation 5

Where:

$Cost_{i,t+1}$: operational and nonoperational costs of company I in year t+1

$Sale_{i,t}$: net sales of company I in year t

3.1.Samples:

Research samples are companies listed on TSE during 1998 to 2008. In this study to determine the sample size, cluster sampling method based on the judgment is used. Finally companies considering the following features were selected:

- They were accepted on TSE before 1998
- In terms of increase comparability, their fiscal year ends to march.
- They are manufacturing companies
- During the research period the company is not omitted from TSE.

The required information and data are collected from company's financial statements. Distribution of sample companies between different industries has shown in Table 2.

Table 2: number of sample companies from different industries

Name of industry	number of sample companies
Automotive and manufacturing parts	21
Food products and beverages	17
Basic metals	15
Materials and Chemical Products	18
Materials and pharmaceutical products	17

3.2.Hypotheses analysis and results:

For testing research hypotheses, two regression models and panel data method is used according to F test and Hasman's test. Analysis of data indicates the acceptance of fixed effects approach in industry and sample companies. Also, all the research hypotheses were tested at 95% confidence level.

First hypothesis testing:

For analyzing data and testing the first hypothesis and its subsidiary hypotheses the regression model 4 was used. The results from the first hypothesis testing were verified at an industry level and in the entire sample companies. Results of testing this hypothesis in the entire sample companies' level have shown in Table 3.

Table 3: The results of testing the first hypothesis in the entire sample companies' level

variables	T value	coefficient
FS	2.749525	3.420
OMI	-6.41736	-1.8501
IT	0.550843	3.5286-
DR	-1.73907	-2.42
ROA	-2.12117	-4.3710
0.616887		
15.08042		

Results in Table 3 have shown that R^2 is 0.616887 in the entire sample companies' level. It means that independent variables of regression model 4 have the ability to predict 62% of dependent variable's variation. Where the probability value of F test is less than 5%, thus predictions by the above model is significant.

Results of testing the first hypothesis in an industry level have shown in Table 4.

Table 4: The results of testing the first hypothesis in an industry level

Variables	Basic metals			Food products and beverages			Automotive and manufacturing parts		
	p	T value	coefficient	p	T value	coefficient	p	T value	coefficient
FS	.0002) (	3.819786	2.341	(.1864)	1.326896	2.39833	(.6423)	0.465199	6.7584
OMI	.0019) (	-3.16627	-3.970	(.9049)	-0.11961	-1.1366	(.0078)	-2.68765	3.920-
IT	(.0364)	2.537836	2.3810	(.0255)	2.255166	1.0101	(.0108)	2.573683	4.310
DR	(.6264)	-0.48787	-4,0130	(.0029)	-3.02306	-2.0100	(.0406)	2.061175	2.490
ROA	(.6170)	-0.50119	-4.1700	(.0300)	-2.19004	-4.22	(.0438)	2.028674	1.4410
R^2	**0.241497**			**0.700919**			0.348278		
F	2.379525 **0.002058)(**			**17.96742 (.000000)**			4.360678 (0.000000)		

Variables	Materials and Chemical Products			Materials and pharmaceutical products		
	p	T value	coefficient	p	T value	coefficient
FS	(.0000)	10.81867	6.840	(.0000)	10.81867	445191.9
OMI	(.0000)	-6.05153	4.1001	(.0000)	-6.0515	-134059.
IT	(.3207)	-0.88892	99862732	(.3754)	-0.8889	-34179.5
DR	(.0697)	3.352478	-1.0111	(.0010)	3.352478	18471.12
ROA	(.2647)	-1.05082	-43867701	(.2949)	-1.0508	-45169.9
R^2	0.343102			0.445233		
F	4.110325			6.191161		

ISSN 2076-9202

	0.000000)(	(0.00000)

Results in Table 4 have shown that the predictions by the regression model 4 are significant too.

Results related to the acceptance and rejection of subsidiary hypotheses developed in this research has shown in Table 5.

Table 5: The results of testing the hypothesis H0

Variables	All companies	Materials and Chemical Products	Materials and pharmaceutical products	Basic metals	Food products and beverages	Automotive and manufacturing parts
FS	accepted	accepted	accepted	accepted	Rejected	Rejected
OMI	accepted	accepted	accepted	accepted	Rejected	**Accepted**
IT	Rejected	Rejected	Rejected	accepted	accepted	accepted
DR	Rejected	Rejected	Rejected	Rejected	accepted	accepted
ROA	**Accepted**	Rejected	Rejected	Rejected	accepted	accepted

Second hypothesis testing:

For analyzing data and testing the first hypothesis and its subsidiary hypotheses the regression model 5 was used. Second hypotheses were tested in the whole industry level. The results of testing this hypothesis and the first subsidiary hypothesis has shown in table 6 and the results of testing second subsidiary hypothesis has shown in table 7.

According to results in Table 6, data analysis and hypothesis testing represents that the

regression mode is significant in industries level except for Materials and Chemical products industry and According to results in Table 7, data analysis and hypothesis testing represents that the regression mode 5 is significant in industries level except for Materials and Chemical products industry.

Table 6: The results of testing second hypothesis (the first subsidiary hypothesis)

industries	Materials and Chemical Products			Materials and pharmaceutical products			Basic metals			Food products and beverages			Automotive and manufacturing parts		
	p	t	coefficient	p	t	coefficient	p	t	coefficient	p	t	coefficient	p	t	coefficient
intercept	(.000)	28.441	64276.	(.0117)	-2.54977	-3569.505	0.0008	3.4167	3.8001	0.0827	-1.745	-2323.2	0.8542	-0.184	3635.4
net sales	0745	-0.321	-9.320	0.0000	34.7194	0.083539	(.0000	15.281	0.03926	(.0000)	43.905	0.08701	.000)(	23.577	0.0665
R-squared (R^2	0.111003			0.934657			0.733005			0.959866			.844330		
Adjusted R-squared	0.018122			0.928084			0.705761			0.95582			.828689		
F	1.195115 0.317725			142.1962 (0.000000)			26.90484 (0.000000)			237.7572 0.000000			53.98027 (0.000)		

Table 7: The results of testing second hypothesis (the second subsidiary hypothesis)

	Materials and Chemical Products			Materials and pharmaceutical products			Basic metals			Food products and beverages			Automotive and manufacturing parts		
	p	t	coefficient	p	t	coefficient	p	t	coefficient	p	t	coefficient	p	t	coefficient
Coefficient	(.0038)	2.999394	7836.878	. .0644) (	-1.8615	-2015.940	0.0008) (	-3.8984	-4.8101	.01014) (	1.65203	12764.5	0.854	-0.7304	-32211.
Net Sales	.7443) (	0.327505	5.6411	0.0000) (	23.7053	.044123	(.00000)	15.28133	0.057929	.0088) (	2.6675	1.65203	.000 (	23.5771	0.063984
R-squared (R^2)	0.151889			.864755			.789982			0.164864			. 0.468950		

Adjusted R-squared	0.018122	.851150	.768405	0.080584	. 0.415591
F	1.714160	63.56352	36.61185	1.956153	8.788562
	0.120560	0.000000	(0.000000)	0.039801)	0.00000)(

4.Conclusion

Financial reporting reflects the situation of company and provides basis to assess company's performance and making economic decisions. One of the objectives of financial reporting is providing useful information to the users of financial statements for making economic decisions.

The emphasis is on financial reporting information that related to company's performance that is provided through predicting profits and its components. Hence, this research tried to answer to the question whether the financial statements items have the ability of forecasting sales and costs of companies listed on Tehran Stock Exchange or not? To answer this question, two main hypotheses and seven subsidiary hypotheses are developed and sample data was analyzed using regression models and panel data method in five different industries.

The first main hypothesis and its subsidiary hypotheses were examined in the industry and whole sample companies levels. Results from analysis of data and testing the main first hypothesis have shown that the predictions by the regression model 4 are significant. The second main hypothesis and its subsidiary hypotheses were examined in the industry levels. Hypothesis test results indicate that except for Materials and Chemical products industry in other industries the regression model 5 is significant. Overall the results of this research indicate that financial statement items have the ability of forecasting sales and costs of companies listed on Tehran Stock Exchange.

5.References:

- Ansuj. A, et al, (1996). Sales Forecasting Using Time Series and Neural Networks. *International Journal of Forecasting*. Vol 31.Issue 1-2.

- Choi.T, et al. (2011). A Hybrid SARIMA wavelet transform method for sales Forecasting. *Journal of Decision Support Systems*. Vol.51, Pp.130-140.

- Fang, Pi & Lin, Ch, (2002). Forecast of non-alcohlic beverage sales in Taiwan using the Grey theory. *Asia Pacific Journal Of marketing And Logistics*. Vol 14.

- Khaleghimoghadam, H. & Rahmani, A. (2003). Predicting Profit using Financial Statements Items. *Accounting Research Journal.* Vol.1.

- Rieg, R. (2010). Do Forecasts improve over time? A case study of the Accuracy of Sales Forecasting at a German Car Manufacturer. *International Journal of Accounting and Information Management*. Vol 18. NO.3. Pp.220-236.

- Smaros, J & Hellstrom, M. (2004). Using the assortment Forecasting Method to enable Sales Force Involvement in Forecasting. *International Journal of physical Distribution & Logistic Management*. Vol.34, No.2, Pp.140-157.

- Shahabuddin, S. (2009). Forecasting Automobile Sales. *Management research news*. Vol.32, No.7, Pp.670-682.

- Shabahang, R. (2006). Accounting Theory. Vol.1.

- Suwanvijit, W. et al. (2011). Long term sales Forecasting using Lee-Carter and Holt-Winters methods. *Journal of Applied Business Research*. Vol.27, No.1.

- Wu, Ch & Zhang, P. (2004). A comparative study of liner and nonlinear models for aggregate retail sales forecasting. *Department of management*. Vol.11.

-Yang, J. et al. (2005). SVR mathematical model and methods for sale prediction.

ISSN 2076-9202

M*anagerial Auditing Journal*, Vol 62.

ISSN 2076-9202

Linking Motivators to Employee Development.

Anindita Bose Guha

ABSTRACT

The study tries to investigate the impact of financial and nonfinancial motivators on employee / individual growth and development. Data were gathered from 202 modern work cohorts (belonging to generation X and generation Y) belonging to different professional backgrounds. Questionnaire used for the study contained two sets – the demographic set and the motive set. The motive set was designed on the dual factor theory also known as the two factor theory and abridged in accordance with similar motive scale found in management literature. The impact of financial and nonfinancial motivators on employee development (measured in terms of knowledge, skills and abilities) has been tested. Factor analysis was used for identifying the different sets of motivators, and multiple regressions for testing the relationship between motivators and its impact on employee development. The results of factor analysis identified 5 sets of motivators viz. Social, Personal, Financial, Ego and Security. The relation between employees' knowledge and skills to the motivators were found to be significant with a few exceptions. In the era when performance is rewarded in terms of monetary benefits, the study brings to light the different factors that affect the motivation and performance of the employees.

Keywords: Motivators, Generation, Employee development.

1. Introduction and background:

The challenges faced by the contemporary organizations have made it difficult to stick to traditional hierarchy and organizational structures. Human resources of the organizations have now become global. Therefore there is always a call for understanding the culture, the need and the requirements of the employees. In addition 60% of the present working population comprises of the contemporary work cohorts. Therefore the organizations are not only faced with cultural diversity but also faced with generational diversity. This requires more dynamic practices to be followed for the successful recruitment and retainment of the work cohorts.

Graven (2007) in his framework for SHRD (Strategic Human Resource Development) identified the different requirements of the work cohorts (one of the stakeholders) as long term employability, performance and career advancement and that of the owners or investors as reputation, growth and financial returns. Two contrasting set of requirement but can be accomplished only when there is mutual cooperation between the two parties. The present cohorts are open to challenges, adaptable and have belief in self rather than position. These characteristics can not

ISSN 2076-9202

only bring success to the employee but also to the organization. Therefore a good understanding of the requirements and fulfilment of the same by both the parties is necessary to maintain an amiable and continuous relationship.

2. Literature review:

Generational studies:

At the turn of millennium, the present work force is the most diversified in terms of generation, culture and values. The persona of an individual is shaped by the events experienced at their growth stage. Therefore it is common that the communication style, values and expectations of the work cohorts will differ between generations (Glass 2007).

Generation means groups which are identifiable in terms of year of birth, age, location and significant events which mould their persona. In order to increase organizational productivity and innovation of workers the managers need to identify the generational differences (Smola and Sutton 2002).Four generations have been identified by researchers (Arsenault 2004): Veterans (1922-1943); Baby Boomers (1944-1960); Generation Xers (1961-1980); and Nexters (1981-2000).

The core values of the generations have remained no more static. Diversity, techno literacy, fun and information, the values of Generation Xers differs from that of the Generation Nexters who are optimistic, have a sense of civic duty, confident and achievement oriented (Arsenault 2004).These values are different from that of the baby boomers who are more optimistic has a sense of personal gratification and growth. The values of the workforce have undergone considerable changes influenced by generational experiences rather than by maturity and age (Smola and Sutton 2002). Therefore it is obvious that there has been a considerable shift in the preferences of these work cohorts in terms of their likings and needs form a job.

The needs of the contemporary work cohorts as stated by present research studies are interesting work followed by good pay, appreciation for work done and job security (Kovach, 1987; Harpaz 1990; Lindner, 1998). Study by Guha (2010) identified 5 different heads under which the motivators of present work cohorts can be classified. The categories were named as Personal, Social, Ego, Benefit and Security. The importance of growth, achievement, skills acquired from present work were all given more importance by the present work cohorts. Job security is not all that is needed. The work cohorts now look for ample opportunities for learning and development. To retain such employees, the organizations should not only provide financial benefits but also quench their thirst for learning, knowledge and development.

Motivation:

Over the decades several theories on motivation have been developed. The history of work motivation theories has been well compiled by Steers, Mowday, and Shapiro in

their paper *The Future of Work Motivation Theory*,2004. This principle of hedonism (seeking pleasure and avoiding pain) was introduced by the Greek philosophers in the seventeenth and eighteenth centuries. Towards the end of nineteenth century behavioural scientists challenged the use of hedonism on the ground that it lacked clear specification of the pleasurable or painful events. Therefore models based on empirical findings were developed. Of these developments the contribution of a few requires special mention. In 1953 Skinner introduced the reinforcement theories. It was argued that future behavior of individual is guided by contingent relationships. But among these developments made by psychologists the focus of the managers turned on more pragmatic issues. Soon F.W. Taylor and his associates introduced the concept of scientific management. Meanwhile by 1930 the role of group dynamics and the existence of multiple motivational influences were recognized by social scientist and managers. By 1950 numerous models and theories on work motivation emerged which were collectively referred to as content theories. These cluster of motivation theories primarily aimed at identification of factors of motivation. Best noted under the content theories are - Maslow's theory of need hierarchy in 1954, adapted later by Alderfer in 1972. Maslow in his theory stated that individual needs range from basic physical needs, safety and security to belonginess, esteem and self actualization. He further argued that people can think of the higher order needs only after they fulfil their lower order or deficiency needs. By this time Fredric Herzberg forwarded his Dual Factor theory, where he argued that work motivation is to a great extent influenced by the intrinsic challenges that a job withholds. Based on his findings he said that job satisfaction and job dissatisfaction are not opposite to each other. Therefore the factors that lead to job satisfaction were termed as motivators and those lead to job dissatisfaction were termed as hygiene factors. His work has been long appreciated and still holds good for management research and work environment. The concept of job enrichment was first introduced by him.

The mid 1960s brought in a new perspective, the process theories. The main focus of process theory was to delineate the processes underlying work motivation. Steer, Mowday and Shapiro termed the period during late 1960s to 1970s as the golden age. Vroom in the year 1964 presented the Expectancy theory where he argued that employees are rational in their behavior and behave in a manner which will fetch them the best outcomes. Porter and Lawler further expanded the expectancy theory by bringing out the relationship between job effort and performance and performance and subsequent satisfaction. Equity theory introduced by Adams explains that employees respond to perceived unfairness in workplace and both underpayment and overpayment influence their behaviour. Through goal-setting theory researchers discovered that specifying goal, setting difficult goals and goal commitment each

ISSN 2076-9202

enhanced task performance. The pioneers in this area are Locke, Steers and Porter. Finally acclaimed researchers like Bandura in 1977 focused on the role of social cognition and self – efficacy on individuals work performance.

Although substantial refinement and expansion of theories on work motivation have been undertaken during the recent times yet substantive theoretical development has not taken place (Steer, Mowday and Shapiro 2004)

Employee development:

The contemporary organizations face several challenges – both external and internal. Challenge in profitability, innovation, productivity, changing work culture, technology, retention of customers and employees. Surviving these challenges is only possible with a healthy organization and dedicated and developed work force. The development of organization is not possible by overlooking the "human side" of it. The work force comprises of individuals and groups. French and Bell (2002) mentioned that for organizations to develop there are two basic assumptions which it should remember: firstly, individuals have a desire towards personal growth and development. Secondly, individuals are capable of and willing to attain the organizational objectives. The decision for developmental activities to be pursued by the individual is influenced by several perspectives- personal values, social exchange factors, authenticity and credibility of the source of information, moral and infrastructural support provided by the organization, importance of personal growth and development (Maurer, Pierce & Shore 2002). The presence of intrinsic motivation for development and growth is not only beneficial to the employee but also to the organization at large. Kuvaas and Dysvik (2009) identified that employees' high in intrinsic motivation are expected to be involved in organizational citizenship behaviour. Thus organizations should strategically utilize the different forms of motivation to develop the potential of the employees.

3. Research objective/ hypotheses:

The review of literature reveals that the factors that motivate and interest the contemporary work cohorts have undergone change. Therefore, to sustain in the long run the companies need to constantly build and develop their employees' potential. Pay for performance, promotion on skills and achievements rather than on years spent on job are the basis for acquiring, retaining and motivating the contemporary work cohorts. Under such circumstances the different sets of motivators can be identified and utilised for the purpose of developing employees. Therefore the objectives of the study are:

- To identify the different sets of motivators and ,

- To study the impact of the motivators on the two elements of employee development (skills and knowledge).

The hypotheses for the study were set as follows:
H_{o1}: Skills have a negative relation with the different sources of motivation (Social, Personal, Ego, Financial and Security)
H_{o2}: Knowledge has a negative relation with the different sources of motivation (Social, Personal, Ego, Financial and Security)

4. Research Methodology:

Selection of instrument:
The questionnaire was devised so as to ensure that the respondents do not include there name or any code on the questionnaire. Each of the subjects was circulated a survey questionnaire which consisted of two information sets. First the demographic set, developed inorder to collect information related to age, gender, qualification and their profession. The second set consisted of the motive set, designed on the basis of motivation-hygiene theory and abridged in accordance with similar motive scale found in management literature. The 16 items to represent motivator were identified as used by Doloi 2007; Hoff, Ellis, Crossley 1988 and Frank Giancola 2008 in their study. Whereas the hygiene factors consisted of 15 items which are identical to the variables used by Doloi 2007; Hoff, Ellis, Crossley 1988 in their study. Recent studies on generation X and generation Y reveals that autonomy, feedback, personal values, leadership and learning are few important aspects considered by the new generation (Giancola 2008) which was not used in the dual factor theory. Therefore, while collecting data for the present study these aspects were also considered. Two additional questions to understand their perception on employee development were asked. Employee development is explained in terms of Knowledge and skills acquired from the job.
The questionnaires were circulated through the HR officer of banks and showroom, sales manager of insurance companies, to the advocates in bar association and to PG hostels in a medical college in the state of Assam. This was done in order to have a cross mix of the respondents for better evaluation and results.
Summary statistics of respondents

The participants to the survey were from different disciplines and were born after 1960. For the study, the method of stratified random sampling has been adopted. The population the study consisted of 756 individuals of whom 200 were advocates in bar association, 100 employed in private insurance sector, 90 in private banks, 216 medical doctors and 150 in other services. A method of proportional allocation has been followed to select the sample size of 200.

Questionnaires were administered to 215 randomly selected individuals. Of the returned questionnaire 202 responses were found to be useable. 4% responses were rejected due to improper responses. Of the total participants 136 (67%) were male and 66 (33%) were female. 56% of the participants were in the category of Generation X (1960-1980) whereas 44% were from Generation Y (born after 1980). Though a method of proportional allocation was followed any increase in number of participants in any category was not restricted. 15% of the participants were bank employees, 31% doctors, 22% participants were from insurance and another 22% from law, and the remaining 10% from other service sectors.

5. Analysis and Interpretation:

Factor Analysis

There is no set rule of thumb as far as factor loadings are considered in the factor analysis. Typically the threshold for factor loadings depends on the size of the sample. With a sample size of 202 a factor loading greater than .364 is acceptable (Stevens 1992 in Doloi 2007). However, loadings in the range of ±.30 to ±.40 are considered to be the minimum level of acceptance. However for the purpose of the study items which cross loaded were eliminated and only those having a loading higher than .40 have been retained.

Bartlett test of sphericity is one of the tests used for determining the appropriateness of the sample size for conducting a factor analysis. The test to be significant it is good to have values above 0.5. The factor analysis conducted shows that the test is significant. Measure of sampling adequacy 0.734> 0.5 is considered middling and therefore good for factor analysis.

Factor Analysis identified 5 sets which were named as social, personal, ego, financial and security. Typically, the naming is done on the basis of the characteristics of the variables (Doloi,2007) or on the basis of variables with the highest loading. For the study the characteristics of the variables were taken into consideration. Technology and

Table I: Rotated Factor Matrix
(Source: Author's calculation)

		Variance explained	Cronbach's alpha
Social			
Networking	.712		
Interact peers	.709		

Helping peers	.700	13.08	.772
Feedback	.592		
Breaks	.439		
Personal			
Growth	.830		
Achievement	.825	12.13	.822
Responsibility	.624		
Ego			
Decision Making	.751		
Leadership	.642		
Autonomy	.611	11.19	.691
Environment	.605		
Social status	.459		
Financial			
Fringe benefit	.775		
Rewards	.756		
Profile	.565	10.63	.628
Challenge	.532		
Security			
Job Security	.789		
Advancement	.593	9.46	.608
Experience	.518		
Overall		56	.831

the contemporary work setup has improved both inter and intra departmental communication among the employees. This increased interaction among the co-workers is in the form of networking; inter group communication and taking breaks to spent time with family and friends. Therefore, this group was named as Social factor as it comprises of the need to socialize. Second factor extracted composed of growth, achievement and responsibility which are essentially personal in nature and considered important for individual growth and therefore named as personal factor. Third factor was named ego as it comprised of factors which individuals consider to give them pride and social recognition and status. Materialistic and external rewards including the employer profile and the challenges the work holds and was grouped under one category. This was named as financial factor. And the last category consisted of job security, accountability of experience and advancement in

career therefore, named as security factor. The total variance explained by the five factors was 56% which signifies that there are other items which can also be added to the groups.

The next requirement was to test the Cronbach's alpha for the five factors. Since the reliability of overall items as well as the individual factors are closer to 1 it can be said that the factors extracted are reliable.

Testing of Hypothesis:

Table II: Test of 1st hypothesis

Dependent variable: Skill					
Independent variables	Standardized Coefficients	t	Sig.	Adjusted R^2	F-test
Social	0.136	2.458	0.015**	0.382	25.828 (0.000***)
Personal	0.497	8.959	0.000***		
Ego	0.138	2.486	0.014**		
Financial	0.089	1.606	0.110		
Security	0.324	5.837	0.000***		
Note: ** and *** denotes significance at 5% and 1% level of significance respectively.					
Source: Author's calculation					

H_{o1}: Skills have a negative relation with the different sources of motivation (Social, Personal, Ego, Financial and Security)

The results of multiple regression analysis using the enter method are shown in the table II and III. Table II suggest that the five sets of motivators accounts for 38% of the variance (Adjusted R^2) in skills developed by employees. All the non-financial motivators have a significant positive contribution in the development of skills. However the financial set of motivators though shares a positive relation but is not significant in its contribution. Therefore, the formulated null hypothesis is partially rejected as only social, personal, ego and security motivators share a positive and significant relation with employee skill development.

Table III: Test of 2nd hypothesis

Dependent variable: Knowledge					
Independent variables	Standardized Coefficients	t	Sig.	Adjusted R Square	F-test
Social	0.375	6.765	0.000***		
Personal	0.221	3.99	0.000***		
Ego	0.235	4.246	0.000***	0.382	25.847 (0.000***)
Financial	0.136	2.447	0.015**		
Security	0.366	6.598	0.000***		
Note: ** and *** denotes significance at 5% and 1% level of significance respectively.					
Source: Author's calculation					

H_{o2}: Knowledge has a negative relation with the different sources of motivation (Social, Personal, Ego, Financial and Security)

The 2nd test revealed that knowledge has a positive and significant relation with both financial and non financial motivators. Therefore, we can conclude that the concerned data provide sufficient evidence to reject the null hypothesis. 38% of the variance is explained by the different sets of motivators.

6. Findings and recommendations:

The study shows that both knowledge and skills can be developed by instigating the social, personal, ego and security needs of the employees. Financial motivators though did not show any impact on skill but can be used to develop knowledge. The employers by providing financial support can motivate the individuals to acquire more qualification. This in the long run will not only provide benefit to the individual but also to the organization. The members of the organizations are responsible for the development and survival of the organization at large. The benefits developed and given to the employees should not only satisfy the stakeholders but also should benefit the organization in the long run.

Sharing of knowledge and learning is a continuous process. The knowledge content of

the organization is vast and therefore needs to be identified, developed, updated, retained and disseminated properly. This can be done with the help of the people of the organization. The study reflects that social interaction helps in increasing and sharing of knowledge and developing skills. People are now receptive and open to criticism also. The basic needs of present generation are no longer physiological but are more psychological in nature. The urge to grow and develop exists from the very beginning of their career. In the process they learn to take decision, grow leadership skills, face challenges and hence develop a better work culture. The open culture to which the present generation belongs enables and encourages knowledge sharing and learning. This initiative should be acknowledged and rewarded by the organizations for continuous development. Job security does not just mean being in the job, but also to develop and acquire the skills constantly demanded by the changing environment. Therefore development of skills and knowledge among the present work cohorts is common. This can be encouraged by channelizing the existing sources of motivators properly.

7. Limitation and scope:

The study is limited to the present work cohorts (generation X and generation Y), belonging to the land of Assam. Hence cannot be generalised to the masses. Moreover the experience and newness of the participants to the corporate world may also be responsible for the findings.

The study can be extended both methodologically and theoretically for example incorporating different generations and also by considering the geographical heterogeneity. Further validation of the study can be achieved through SEM (structural equation modelling).

References:

Arsenault, Paul M. (2004). Validating Generational Differences: A Legitimate Diversity And Leadership Issue. Leadership and Organizational Development Journal 25

Guha, Anindita Bose (2010). Motivators and Hygiene Factors of Generation X And Generation Y – The Test of Two Factor Theory. Vilakshan – XIMB Journal of Management 7(2) :121-132

Doloi, Hemanta (2007). Twinning Motivation, Productivity and Management Strategy in Construction Projects. Engineering Management Journal 19(3): 30-40.

French,Wendell L., and Cecil H Bell,Jr. (2002). Organizational Development-Behavioral Science Intervention for Organization Improvement. Prentice Hall of India: New Delhi.

ISSN 2076-9202

Garavan, Thomas N. (2007). A Strategic Perspective On Human Resource Development. Advances in Developing Human Resources 9(1):11-30

Giancola, Frank.2008. Should Generation Profiles Influence Reward Strategy? Employee Relation Law Journal 34(1).

Glass, Amy. (2007). Understanding Generational Differences for Competitive Success. Industrial and Commercial Training 39(2): 99-103.

Hair, Joseph F., William C. Black, Barry J. Babin, Rolph E. Anderson, and Ronald L.Tatham (2009). Multivariate data analysis. Pearson education: New Delhi

Hoff, Andrew, Gary Ellis, and John Crossley. (1988). Employment Motive of Summer Jobseekers in Recreation Settings: A Test of Herzberg's Motivation-Hygiene Theory. Journal of Park and Recreation Administration.

Herzberg, Frederick (1987). One More Time: How do you Motivate Employees? Harvard Business Review 1, 87-96

Kuvass, Bard and Anders Dysvik. (2009). Perceived Investment in Employee Develpoment, Intrinsic Motivation and Work Performance. Human Resource Management Journal, 19(3): 217-236.

Maurer, Todd J. and Lynn M. Shore. (2002). Perceived Beneficiary of Employee Development Activity: A Three Dimensional Social Exchange Model. Academy of Management Review 27(3): 432-444.

Steers, Richard M., Richard T. Mowday, and Debra L. Shapiro. (2004). The Future of Worker Motivation Theory. Academy of Management Review 29(3): 397-387.

Smola, Karen Wey, and Charlotted D. Sutton (2002). Generational Differences: Revisiting Generational Work Values for the New Millennium. Journal of Organization Behaviour 23: 363-382.

Bibliographical notes:

Anindita Bose Guha has been awarded M.Phil. from ICFAI University in 2010 and is pursuing PhD from Dibrugarh University. Presently she is working as a lecture (HR) at ICFAI University Tripura, India. She has 3 yrs of academic experience along with 2yrs of research work. Her area of interest includes organizational behaviour and development. Email: annuguha@gmail.com, Ph. No.: +91 - 9615624083.

ASSESSMENT OF PREFABRICATED HOUSES IN EARTHQUAKE AFFECTED AREAS OF PAKISTAN

Munir Hussain*, Yousaf Abbasi**
*Department of Electrical Engineering and ** Department of Management Sciences
* COMSATS Institute of Information Technology and ** Allama Iqbal Open University, * Abbottabad and ** Islamabad
Pakistan.
munir@ciit.net.pk, yousaf@aiou.edu.pk

Khalid Zaman (corresponding author)
Assistant Professor, Department of Management Sciences
COMSATS Institute of Information Technology
Abbottabad, Pakistan
khalidzaman@ciit.net.pk

Abstract: An earthquake is a natural disaster. Inadequate Housing structures can cause loss of human and material assets. Poor housing, non-resilience and non-seismic resistance housing was the major cause of high death toll and complete destruction of physical infrastructure as by the October 08, 2005 earthquake in Pakistan. After occurrence of this natural calamity, prefabricated houses were initiated as a shelter solution, especially for the Red Zone area of Balakot-Pakistan. Although prefabricated houses are established solution of shelter for seismic endangered areas, this solution needs the complete knowledge of social life and cultural values as well as the meteorological features of the areas concerned.

The present study was conducted in the prefabricated housing area of Red Zone at Balakot. The result reveals that population dissatisfied with the

ISSN 2076-9202

prefabricated houses. A number of factors were found to be responsible for this, namely low quality of material used; non-professional and unskilled workmanship; unnecessary interference by the local government; least community participation; lack of security perspectives; cultural adaptability and climatic suitability; and risk of quick damage. Government should have to focus on this calamity seriously and pay careful attention for future risks.

Keywords: Earth Quake, Pre-Fabricated Shelters, Social Aspects, Cultural Aspects, Dissatisfaction, Balakot, Pakistan.

1. Introduction

A disaster is an event concentrated in time and space, in which a society or one of its subdivisions undergoes physical harm and social disruption, such that all or some essential functions of the society or subdivision are impaired. Earthquakes are the most destructive short-term natural force on earth and have plagued civilizations for millennia. The geographical area of Pakistan has been experienced 139 natural calamities for last eighty years including floods, droughts, cyclones, land sliding; earthquakes etc. Indeed Pakistan is the fifth most sensitive nation of the world in term of earthquake. Seismic activity in Pakistan is mainly concentrated in the north western region of the country, along the boundary of the Indian plate and the Iranian and Afghan micro plates.

The October 2005 earthquake was the most debilitating natural disaster in Pakistan's history. The Geological Survey's measuring of earthquake was 7.6 Richter scale. The epicenter was 60 miles northeast of Islamabad, Pakistan. This earthquake caused more than 88,000 people death, 70000 severe injuries or disability and more than 3.3 million people's homelessness, making it the 13th deadliest earthquake in recorded history. Besides, public & private housing, shelter infrastructure, social services delivery, governance structure, commerce and communication systems have been severely damaged or destroyed.

After immediate occurrence of this calamity, various national and international agencies conducted seismic studies of the area of Balakot including Chinese, Turkish and Norwegian agencies. National Engineering Services Pakistan (NESPAK) also conducted five studies i.e. Seismic Hazard Zoning, Microzonation (At Town Level), Landslide Studies, Geotechnical & Geophysical Studies and Instrumental Recording of Seismic Activity of the Balakot area.

Earthquake Reconstruction & Rehabilitation Authority (ERRA) and Provincial Earthquake Reconstruction & Rehabilitation Authority (PERRA) convened a special session at Mansehra on March 29, 2006.This session was briefed by the NESPAK that Balakot area has close proximity with epicenter and 78 % of the town area lie on the two fault line which might be caused future earthquake. It is, therefore, the town area of old Balakot (Graian and modern settlement) was declared Red Zone (RA) area and prohibited all type of construction and related activities.

It was unfortunate that ERRA and PERRA decided to relocate the specific area of Balakot (RZA) and prohibited all types of construction in the same area while they did provide the provisional residential solution for the affected population of the area. It was the major gap of ERRA construction policy pointed out by the stakeholders during the survey in the study area. ERRA & NESPAK required three years for the development of the (NBC) at Bakrayal site, so it was the question how affected people of Balakot (RZ) area manage their residences and living.

As a temporary shelter solution various organizations started construction of prefabricated houses for the affected population of the Balakot (RZ) area. Among them Saudi Public Assistance for Pakistan Earthquake Victims (SPAPEV),Kuwait Joint Relief Committee (KJRC),National Engineering & Scientific Commission (NESCOM),United States sponsored International Relief (IR) are the major organization in term of quantity of prefabricated houses for the same area. SPAPEV launched the biggest (in number of houses) Prefab Housing Project in Balakot (RZ) area contracted by three installing companies.

This study is focused on the same project in the light of the set objectives.

1. To examine the prefabricated housing projects in the study area.
2. To investigate pros & cons of Prefabricated Houses in the study area.
3. To study the perceptions of affected people regarding the Prefabricated Houses in the study area.

4. To suggest policy measures for improvement in existent ones & future Prefabricated Housing Projects.

The research work supposed to be done had so much delimitation, which is of vital importance. There may be a number of problems related to prefabricated houses but only two of them are included in this research i.e., social and cultural problems.

Including section 1 (introduction), this paper is organized in six sections. Section 2 describes a comprehensive literature review. Section 3 provides data source and methodology. The empirical results are presented in section 4, while the final section concludes the study.

2. Literature Review

The importance of review of literature lies in the fact that it highlights the main finding of similar and relevant literature and research studies, which have been completed by the researchers in the past. As far as this study is concerned, it covers the disaster management aspects and shelter solution after occurrence of Earthquake October 2005.Therfore,the available studies conducted on disaster concerns, its management and disaster particularly earthquake resistant housing for affected population were reviewed.

Agrawal and Shah (2001) stated that earthquake does not kill; badly built houses do. Though this is a time-tested lesson, it is often forgotten soon after an earthquake. No building can remain entirely free of damage a quake; still, all houses, big or small, can be made safer. Structures can be made to withstand earthquake of a particular magnitude by taking certain precautions. Buildings collapse as a result of inertial forces. During an earthquake, the lower part of a building tends to vibrate as it is in direct contact with the ground. The force of inertia, however, keeps the upper portions static. This conflict of forces leads to collapse.

Gupta (2003) discussed that Himalayan portion of the Alpide belt is seismically one of the most active intra-continental region anywhere in the world. During 1897-1952 there was a phase of very high seismic activity when 14 major earthquakes occurred. He stressed the microzonation of important cities with building codes and proper engineering consideration. All this needs to be done in a short time frame, so that people are well prepared to face and reduce the loss of human lives and damage to property by major earthquakes

Wisner (2004) reflected a common opinion when they argue that all disasters can be seen as being man-made, they are reasoning being that human actions before the strike of the hazard can prevent it developing into a disaster. All disasters are hence the result of human failure to introduce appropriate disaster management measures. Hazards are routinely divided into natural or human-made, although complex disasters, where there is no single root cause, are more common in developing countries. A specific disaster may spawn a secondary disaster that increases the impact. A classic example is an earthquake that causes a tsunami, resulting in coastal flooding.

IOM (2005) declared that on the ground, however, confusion reigned supreme. There were obvious signs of lack of planning as the emergency services swung into action. It was obvious that the authorities were ill prepared and ill-equipped to deal with a catastrophe on this scale. While many people, including ordinary citizens, battled tirelessly to help those trapped underneath the rubble, their courage and sense of duty was clearly not a substitute for a strategy.

Ghosh (2006) explained that the word disaster is rooted from the Greek language consists of dis means bad or breakage and aster which is the name of a star. So as, the word disaster's root is from astrology; this implies that when the stars are in a bad position a bad event will happen. Hazard is an inescapable part of life, no one can live in a totally risk-free environment. Risk is sometimes taken as synonymous with hazard but risk has the additional implication of the chance of a particular hazard actually occurring. Therefore a hazard can be defined as 'a potential threat to humans & their welfare and risk as the probability of hazard occurrence.

BBC (2006) reported that one-year after about 400,000 people face a second winter without permanent shelter in the mountains and valleys of northern Pakistan, according to the International Federation of Red Cross and Red Crescent Societies. The UN says there are about 35,000 people still living in 45 tent camps and agencies are expecting at least another 20,000 to come down from the hills in the next couple of months before winter, when temperatures can drop to 15C or 20C in the highest villages.

RISEPAK (2006) identified that that the government should work, from the very beginning with organizations like National Database & Registration Authority (NADRA), which have the technical capacity and ability to oversee the surveys and information collection. This has been the case for the second phase of house grants

ISSN 2076-9202

distribution. ERRA has contracted NADRA for streamlining the data process. They have been involved in the process from the very start, from designing the forms, training of the personnel, entering that data and making it available at the district offices through their IT cells. However, there are some inherent problems here as NADRA is just digitizing the information, not overseeing data collection. A quick glance at a subset of this data shows the failure to establish any streamlined methods for data entry.

Auteur (2007) investigated that the destructive effects of changing settlement patterns on the traditional building stock explores earthquake damage on traditional Turkish Buildings, analyzing the quakes occurred. Study was focused on the interpretation of features that increase the earthquake resistance of timber-framed buildings, which are related to the selection of land and the use of the lath and plaster technique, timber lintels, brace and nails

World Bank & Asian Development Bank (2007) showed 203,579 housing units were destroyed and 196,575 units were damaged. Some 84 percent of the total housing stock was damaged or destroyed in AJK, while 36 percent in NWFP. However, these figures have grown in view of severe aftershocks and increased access to remote areas after the initial survey. Ninety percent of the destroyed or damaged housing is found in rural areas.

PRCS (2008) Disaster Management is the core area of work of the Pakistan Red Crescent Society. Besides natural disasters to which our country is prone to, we now suffer from many man-induced disaster situations, which is a fall out of situation along our western borders. The PRCS has set accordingly priorities (see PRCS Program Priorities) of Disaster Management. Disaster Preparedness hardware support covers small mitigation projects in vulnerable communities, establishment of Disaster Management Cells at vulnerable districts with technical, human and material support. It also includes maintenance of minimum stock level of relief stores at all the time, communication and team of volunteers to respond immediately to any disaster situation.

Although a lot of work was done on the disaster and its management but prefabricated houses as a shelter solution for earthquake hit area was not taken; it is the reason that little work is available in Pakistan and abroad on this aspect of disaster management. In this way, present study is an endeavor towards this end and it is first of its nature.

3. Data Soruce and Methodological Framework

This research is designed to get the data through primary and secondary sources. In the light of objectives, a questionnaire is designed to collect the primary data from respondents. In order to collect reliable and valid information from the respondents, a pilot study will be conducted to test the questionnaire. Though the language of the questionnaire is English & Urdu but for understanding and clarification of questions, local language i.e. Hindko will also be used to collect necessary and valid required information.

Similarly, unstructured interviews of local government representatives and installing companies' personnel will be conducted in the study area. Secondary data like population reports, various studies on Balakot earthquake and web resources will be used for completion of this study.

3.1. Population

Hazara region of KPK Pakistan has five districts i.e. Abbottabad, Mansehra, Haripur, Battagram and Kohistan. District Mansehra is administratively divided into four tehsils (Subdivision), Mansehra itself, Balakot, Oghi & Kala Dakha (PATA). Tehsil Balakot is the second largest tehsil of district Mansehra which consists of 12 union councils.

Universe of the study is the Red Zone area of union council Balakot and union council (UC) Garlat Balakot which is collectively known as Balakot town. Four thousands affected household are decided to get prefabricated houses; whereas twenty eight houses were completed and handed over to the owners till the completion of this study in the study area.

3.2. Sampling Technique

The area was purposely selected for the study, because there were similarities in people perceptions in the study area. The population of this study consisted of all households who got prefabricated houses so far. They were 3000 but half of the total households had not settled in them till the collection of data and study completion A visit was made to the Red Zone area of Balakot and with the help of village organization, activists, officials and other key informants compiled and prepared detail of households having prefabricated houses. The sample size of the research was 120 households.

3.3. Theoretical Framework

A theoretical framework for the variables of prefabricated houses and associated network is consist of certain hypothesis i.e.,

Ho: People are satisfied on social cultural aspects of prefabricated houses.

HA: People are not satisfied on social cultural aspects of prefabricated houses.

Ho: Prefabricated houses provide complete security and privacy to their in habitants.

HA: Prefabricated houses do not provide complete security and privacy to the people using them.

Figure 1 shows the theoretical framework for first hypothesis shows that Social & Cultural aspects of prefabricated houses are independent variables and people's satisfaction depends upon them so we can say that people's satisfaction level is the result of the cause i.e independent variables.

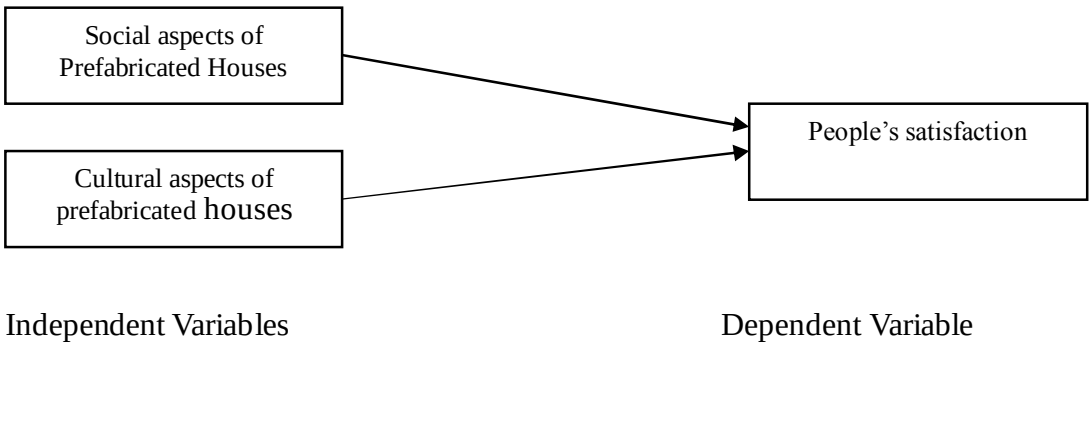


Figure 1: Theoretical; Framework for First Hypothesis

Source: Self Extracted

Figure 2 shows the dependence of security and privacy on prefabricated houses. So in this case prefabricated houses are as independent variable which is acting on security and privacy which is dependent variable.

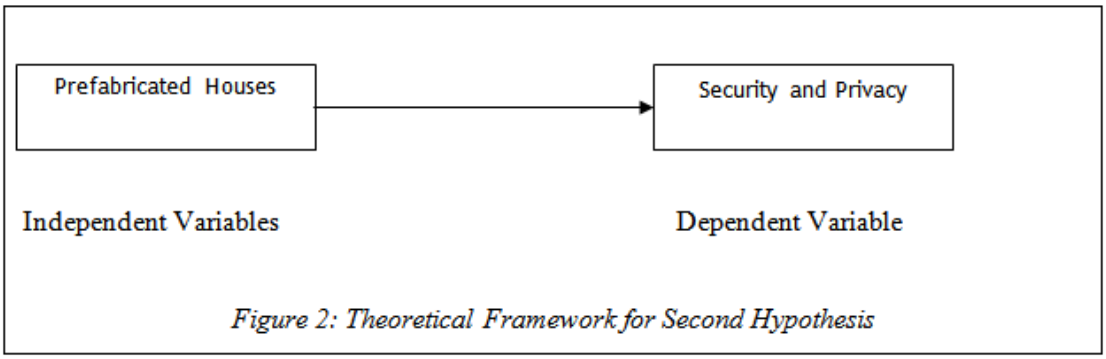


Figure 2: Theoretical Framework for Second Hypothesis

Source: Self Extracted

Figure 3 show the over all scope of the research and integrates theoretical frameworks of both the hypothesis. It shows how both the propositions are interlinked and in which circle the research has to operate.

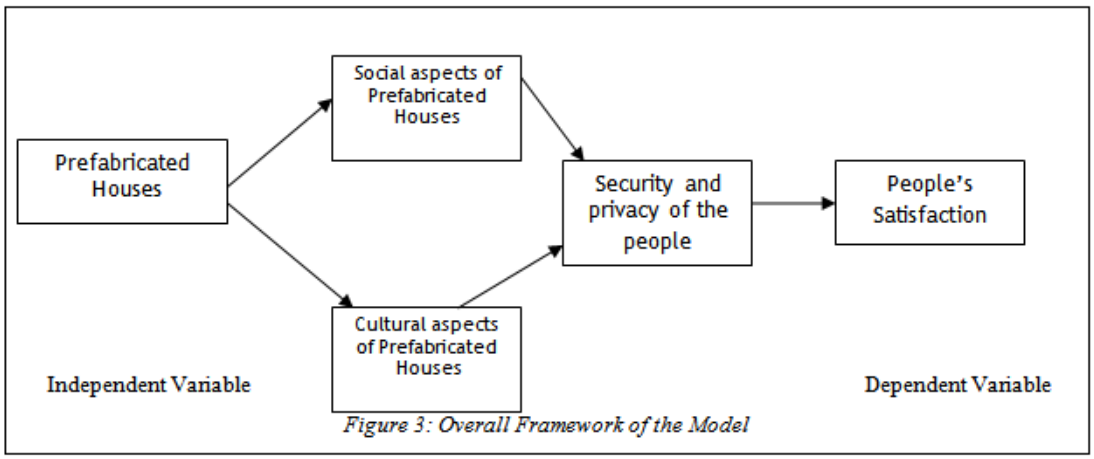


Figure 3: Overall Framework of the Model

4. Results and Discussion

The descriptive statistics for the data analysis consists of gender classification in the disaster management area in which 90 are male and 30 are the female. Another statistics regarding material assistance i.e., only 6% respondents have received material assistance from government while rest is giving no assistance from government. 33% respondents reported that Government preferred the affected mountainous areas located 1400 feet height from the city area of Balakot; therefore, those people didn't received government shelter. 34 % respondents believed that Government was depending on (SPAPEV) prefabricated houses project which was expected in the extreme cold weather condition after occurrence of calamity. Whereas 17 % respondents told that Government was totally depending on NGOs working and

operations for shelter material provision, this is why they are ignoring the city area of two UCs, Garlat Balakot and Balakot. While 10 % of the respondents declared the corruption of the functionaries of Local Government, who did not distribute the shelter material among the affected people. Initially they did privately stored the material (GI Sheets) and later on either sold or used as political bribe during the general election 2008.

4.1. Overall Satisfaction

Table 1 shows respondent's overall satisfaction / dissatisfaction level on prefabricated houses in terms of total residential needs.

Table 1 Sample Respondents Showing Overall Satisfaction in Terms of Total Residential Needs

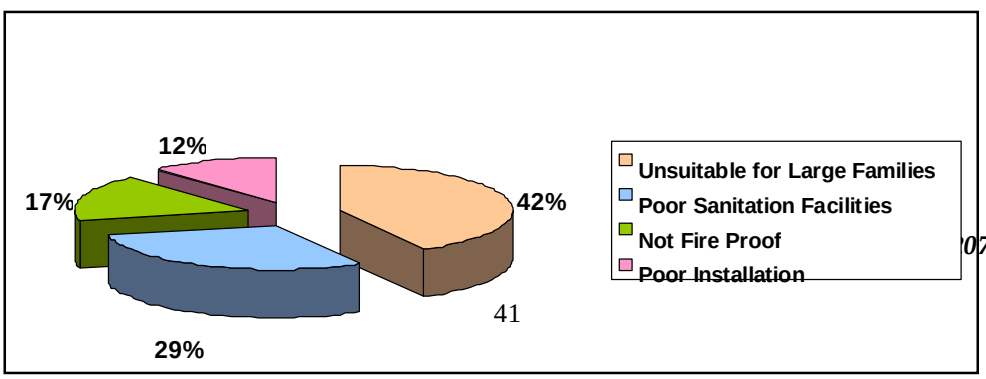
Union Council / Sources	Total No.	Satisfied in Terms of Total Residential Needs			
		Yes	%	No	%
Garlat	90	7	7.78	83	92.22
Balakot	30	2	6.67	28	93.33
All	120	9	7.50	111	92.50

Source: Self Survey

In Garlat and Balakot, only 7 and 2 respondents of study area were satisfied in terms of total residential needs provided by prefabricated houses in the both union councils i.e., Balakot and Garlat Balakot. While 111 respondents are dissatisfied in terms of residential needs in both union councils of Garlat and Balakot.

4.2. Reasons on Overall Dissatisfaction

Table 2 indicates respondents reporting reasons of overall dissatisfaction in terms of total residential need provision by the prefabricated houses. 42% of the total respondents were dissatisfied because of space availability for large families, small sized two rooms with congested kitchen; 29% respondents were dissatisfied due to poor sanitation facility. 17% respondents were argued about lack of fire proof facilities while 12% respondents were dissatisfied due to poor installation of electricity wires etc.



076-9202

Figure 4: Percentage Respondents Reporting Reasons of Overall Dissatisfaction in Terms of Residential Needs, Respondents Satisfaction, Dissatisfaction about Social & Cultural Aspects

Table 3 shows the sampled respondents satisfaction reporting on the socio-cultural aspects of these prefabricated houses in the study area. According to them, majority of the respondents were not satisfy as per the socio-cultural needs are concerned.

Table 3: Sample Respondents reporting the number of People Satisfied, Dissatisfied and Ambiguous about Social and Cultural aspects of Prefabricated Houses

Status	Social Aspects Of Prefabricated Houses	Cultural Aspects Of Prefabricated Houses	Average
Satisfied	36	19	28
Don't Know	1	1	1
Dissatisfied	83	100	92

Source: Self Survey

They were of the view that they were failing to provide privacy which is very important element of that segment of the society, it is because of the no boundary wall as well as opening of the compound area in them. While only a simple minority 28 % of the total respondents was satisfy because of the location and space of installation. Similarly the ignorable human element did not respond on this issue of socio cultural satisfaction of the prefabricated houses.

4.3. Sample Respondents Providing Complete Security & Privacy (Yes/ No)

Table 4 shows that sample respondents' opinion on security and privacy maters of the prefabricated houses in the study area. According to available data an overwhelming majority of them were not satisfied with them as far as the security and privacy is concerned.

Table 4: Sample Respondents reporting the number of People with responses Yes, No and don't know about prefabricated houses providing complete security and privacy

Status	Complete Security	Complete Privacy	Average
Yes	31	23	27
Don't Know	1	2	2
No	88	95	92

Source: Self Survey

They were of the view that these houses had low quality lockage system as well as material used; it was not difficult to break windows and doors. On the other hand these houses are not suitable for a family having married sons and daughters. While 28 percent of the total respondents were satisfied because of single family or having adjacent residential rooms. Similarly a negligible population did not respond on them.

4.4. Union Council Wise Respondents Satisfaction, Dissatisfaction about Social & Cultural Aspects

Table 5 shows the Union Council wise data on sample respondents satisfaction and dissatisfaction due to socio-cultural implications.

Table 5: Union Council Wise Perception of Sample Respondents Showing the Satisfaction and dissatisfaction of Social, Cultural aspects of prefabricated houses

		Satisfied			Dissatisfied		
Union Council	Total No.	Social Aspects	Cultural Aspects	Average	Social Aspects	Cultural Aspects	Average
Garlat Balakot	90	17	21	19	73	69	71
Balakot	30	10	8	9	20	22	21
All	120	27	29	28	93	91	92

Source: Self Survey

According to available data, majority of the respondents in both of the Union Council; Balakot and Garlat Balakot were dissatisfied as far as the socio-cultural needs of the

area are concerned. Out of 90 respondents of the Union Council Garlat Balakot, 71 were dissatisfied and 19 were satisfied; similarly out of 30 respondents of Union Council Balakot 9 were satisfied and 21 were not satisfied.

4.5. Union Council Wise Respondents Regarding Complete Security & Complete Privacy

Table 6 shows the satisfaction and dissatisfaction of the respondents in respect of security and privacy aspects of the prefabricated houses installed in the study area. According to attached data, majority of the respondents were not satisfied regarding the complete security and privacy aspects of them.

Table 6: Union Council Wise Perception of Sample Respondents Showing the Satisfaction and dissatisfaction of people regarding complete security and complete privacy of prefabricated houses

Union Council	Total No.	Yes			No		
		Complete Security	Complete Privacy	Complete Security	Complete Privacy	Complete Security	Complete Privacy
Garlat Balakot	90	13	21	17	77	69	73
Balakot	30	14	8	11	16	22	19
All	120	27	29	28	93	91	92

Source: Self Survey

As far as the individual Union Councils are concerned, 73 respondents of Union council Garlat Balakot were dissatisfied while 17 were satisfied; similarly, out of 30, 19 respondents of Union Council Balakot were satisfied and 11 were not satisfied. Majority opinion during the collection of data was that there houses were not fulfilling their residential needs keeping in view the socio cultural values of the area.

4.6. Hypothesis Testing – Ordinary Least Square Regression (OLS)

The reasons for using this methodology are many. The parameter estimates obtained by Ordinary Least Squares have some optimal properties. The computational procedure of OLS is fairly simple as compared with other econometric techniques.

The data requirements are not excessive. The least squares method has been used in a wide range of economic relationships with fairly satisfactory results and its mechanics are simple to understand. Table 7 shows more reliable estimates of our hypothesis.

Table 7: Determinants of People's Satisfaction about Pre-Fabricated Houses
Dependent Variable: Satisfaction

Variables	Coefficient	Std. Error	t-statistics	Significance
Constant	0.233*	0.220	4.053	0.0016
Social Aspects	-0.604*	0.961	-2.764	0.0171
Cultural Aspect	-0.074**	0.026	-2.328	0.0382

Note: *, ** indicates 1 and 5 percent significance level

Statistical Tests:

R – Squared	0.645	F – Statistic	14.597
Adjusted R – Squared	0.601	Probability (F – Statistic)	0.0000
Durbin – Watson Statistics	1.710		

The empirical results, given in Table 7, appear to be very good in terms of the usual diagnostic statistics. The value of R adjusted indicates that 60% variation in dependent variable has been explained by variations in independent variables. F value is higher than its critical value suggesting a good overall significance of the estimated model. Therefore, fitness of the model is acceptable empirically. The result suggests that all variables have a correlation proving the hypothesis. Coefficients of Social Aspects and Cultural aspects are significant at 1 percent and 5 percent respectively. According to the result, both variables have a negative relationship with satisfaction towards pre-fabricated houses due to social and cultural barriers.

5. Summary and Recommendation

Disasters whether natural or manmade, are like unwelcome guests, northwestern region of Pakistan has played unfortunate host to them. The major part of the same region is vulnerable to earthquakes, floods, droughts, landslides, cyclones etc. The earthquake that jolted on October 08, 2005 has left the shocks and fear as it was caused heavy death toll with complete destruction of housing and infrastructure. Balakot town was the major hit of this earthquake; resultantly heavy loss of human and physical capital which converted the town into debris. Later on, national and international seismic studies located the town near epicenter and two-fault line. In the

light of studies Government of Pakistan (GOP) declared Balakot town area as Red Zone by prohibiting all types of construction and decided to relocate the town 22 km away. Authorities started development work of New Balakot City with the cost PK.Rs.12 billion at Bakeryal area specifying three years for its completion.

The results of the study show that immediate sources of residence after destruction of houses due to the earthquake were provisional cottages constructed by the affected people. Government agencies did not provide shelter material to all the affected population of the town area. Data shows that 5.83% respondents got the shelter material in form of Corrugated Galvanized Iron (CGI) sheets. On the other hand NGOs targeted the mountainous areas under the District Government directives. 28% respondents got material assistance for shelter construction in form of CGI sheets by the NGOs. Nearly, 92% respondents of the study area were dissatisfied on prefabricated houses in term of total residential needs and reliability of prefabricated houses. They highlighted the reasons of this thought that these unsuitable for large family, unsuitable to climatic conditions and poor installation paved the way for their damage soon as were trickling water in rainy season. Finally, regression results also proved their correlation regarding dissatisfaction of the respondents on pre-fabricated houses due to socio-cultural values.

5.1. Recommendations

Based on the findings of the study some recommendations will be offered in this section. It is hoped that these recommendation if implemented by SPAPEV will help to improve the effectiveness of information dissemination and utilization among the all the stakeholders of the study area.

- To appoint a special committee consisting of all stakeholders to probe the matters of concerns.
- Roof leakages and water trickling during the rainy season were severe problems of residents of installed prefabricated houses. Special team of skilled and professional engineering should be sent to the project area.
- Installing companies should be accountable in respect of poor quality material, work and delay.
- To formulate the policy which should clearly define prefabricated provision criterion and maintain proper check & balance system?
- To maximize the community role by establishing local; committees and organizations.
- To build compound wall as early as possible so that external privacy should be given to people living in them.

ISSN 2076-9202

- To complete the work of washroom or toilet as early as possible so that people could settle in them.

It should be legality that future prefabricated houses project deeply study the physical, social, cultural & metrological aspects before installation and build them accordingly.

References

Agrawal, DP and Shah, M. (2001). "Earthquake Resistant Structure of Himalayas", New Delhi India. Online available at: http://www.infinityfoundation.com/mandala/t_es/t_es_agraw_quake_frameset.htm

Auteur (2007). "Earthquake Resistance Houses in Turkey", Ankara Turkey. Online available at: http://www.unicef.org/turkeyquake/main.htm

ERRA (2007). "Social Impact Assessment, 8th October 2005", Islamabad, Pakistan,
Ghosh, G.K (2006). "Disaster Management" Vol. VI, A.P.H Publishing Corporation, New Delhi, India.

GOP, (2005). "Earthquake Preliminary Damage and Needs Assessment", Islamabad, Pakistan.

Gupta, Harsh K. (2003). "Disaster Management" Oxford University Press, Hyderabad India, 2003.

IOM,(2006). " South Asian Earthquake Response Information", Pakistan.

RISEPAK (August 2006). A Case Study on Internally Displaced Persons, Relief information System Earthquake Pakistan, Lahore University of Management Sciences (LUMS) Lahore Pakistan.

WB & ADB,(2006). "Joint Study of Pakistan Earthquake Damages", Islamabad Pakistan.

Wisner.B.,(2004). "Natural hazards, people's vulnerability and disasters", London U.K.

Compensation Management in Semi Government Sector

Case study of State Life Insurance Corporation of Pakistan

Muhammad Irfan Hanif

Department of Management Sciences

The Islamia University of Bahawalpur, Pakistan

irfan.h17@gmail.com

Tell: +923346869946

Abstract

Purpose- This research paper seeks to analyze the compensation management, issues regarding compensation and its relation with employee performance & firm's overall results.

Design/methodology/approach- Using the two different and most effective ways of collecting data, questionnaires and Interviews, the results explain the relationship between employee compensation, job satisfaction, performance and business results.

Findings- Equality in compensation and performance based pay system can better lead to employee satisfaction and improvement in performance of the business.

Research Limitations/implications- A limitation is the inability to control for employee performance and satisfaction with the increased workload.

Practical implications- Performance based compensation system has been linked to the increased job satisfaction, low absenteeism and increased business results.

Originality Value- The paper is first to study the relationship between compensation, job satisfaction and business results in detail while additionally testing originality of the relationship and controlling for fixed effects.

Key Words: Employee Performance, job satisfaction, Benefits

ISSN 2076-9202

Paper type: Academic Term Paper

Introduction

Compensation management, also known as salary administration or remuneration management, is concerned with designing and implementing the compensation policies and practices. Compensation management is affected by different factors and varies organization to organization. A sound compensation system is concerned with the provision of both financial and non financial reward to the employees and often includes salary, incentives, bonuses, allowances, fringe benefits and perks to the employees. Employees with different responsibilities have different compensation packages. Performance based and time based system of rewarding the employees are most common and perhaps oldest ways that prevail in almost every organization. In today's competitive era, compensation management has become of great importance for employees as wall as employers. Employers must have to design such a compensation package which has ability to attract and retain the talented employees. The significance of compensation increases when government acts as an employer in public sector. This study concerns with the compensation management in the semi government sector of Pakistan.

Compensation management in semi government sector of Pakistan has become a hot issue. The game of compensation is not much tricky for private sector employers as private sector is profit oriented and public and semi government sector is typically concerned with non-profit activities like law and order (police department), health care (hospital service), education and so on. The private sector may stagnate their compensation packages during recession but most of the governments have to continue to increase compensation for its sector workers due to inflationary pressure

ISSN 2076-9202

or pressure from labor unions. At the same time, there is growing concern about the shortage of funds in the public and semi-govt sector. Profit oriented semi govt organizations like State Life Insurance Corporation of Pakistan (SLIC) have to give high compensation packages to retain their quality and talented employees and to compete in the market**.**

The paper examines the compensation system in administration division of the State Life Insurance Corporation of Pakistan (SLIC). The survey was conducted in the Bahawalpur Zone of SLIC. SLIC is the market leader in the insurance sector with assets more than PKR.950 billions. It has two main divisions: marketing and administration. This study is about the compensation management and key issues regarding compensation faced by the employees of administration division of SLIC.

At the time of independence of Pakistan in 1947, there were limited insurance companies operating in Pakistan. Some of them had both life and general departments. Some foreign companies were also operating in Pakistan. Some companies had their head office in cities, which were left in territories now forming parts of India, and thus their operations in areas forming Pakistan were wound up.

The remaining companies both local and foreign were left in the market and they struggle to spread the message of life insurance in their own way. Their agency structures, commission rates, premium and bonus rates and policy contracts varied. In quarter of a century after the emergence of Pakistan, the number of companies rose to 32. Each company had its own working pattern and agency system. The number of field management tiers was also different in different companies.

The life insurance business in Pakistan was nationalized under a Presidential Order on 19th March 1972. It was executed in two stages. In the first stage which covered the period 19th March to 31 October 1972, the management of 32 life insurance companies was taken over by the government. Trustees and sub-trustees were

ISSN 2076-9202

appointed by the Government to takeover different companies and to co-ordinate and guide their activities.

The Government constituted Life Insurance Management Board (LIMB). The Board's term included the task of recommending a permanent set up of life insurance within the framework of nationalization. The Board recommended establishing a single corporation with three units.

The second phase of nationalization started by establishment of Single Corporation called State Life Insurance Corporation of Pakistan with 3 Units called A, B, and C Units operating throughout Pakistan and competing with one another.

On 1st October 1975, the 3 Units merged and different zones were created. Initially there were five zones with their zonal offices at Karachi, Hyderabad, Lahore, Rawalpindi and Peshawar. The figure has increased to 26 Zones under four different Regions, South, Central, North and Multan headed by very competent executives.

Up till now there are 10 foreign resident insurance companies, 47 local (national) insurance companies and 3 public sector insurance concerns.

Now SLIC has made steady progress in all fields of its operations and Corporation is making very positive strategies for not only maintaining its market leadership but displaying beyond any doubt that it deserves the matchless corporate image created during the last three decades.

The corporation has following core objectives:

- To run life insurance business on sound lines
- To provide more efficient service to the policyholders
- To maximize the return to the policyholder by economizing expenses and increasing the yield on investment
- To make life insurance a more effective means of mobilizing national savings

ISSN 2076-9202

- To widen the area of operation of life insurance and make it available to as large a section of the population as possible, extending it from the comparatively more affluent sections of society to the common man in towns and villages
- To use the policyholder's fund in the wider interest of the community

Objectives of Study

The study has following key objectives:

- To analyze and understand the problematic factors regarding compensation management system at State Life Insurance Corporation of Pakistan (SLIC)
- To understand the basis of compensation practiced at SLIC
- To recommend possible solutions of the currently existing problems of compensation management at SLIC

Literature Review

Compensation refers to the benefits, financial and non-financial, received by the employees from their employers (Milkovich et al, 2002). According to Martocchio (2006), compensation represents the intrinsic and extrinsic reward received by employees because of performing their jobs. Byers and Rue (2006) also have the same opinion that compensation includes extrinsic rewards that employees receive in exchange of their services to the organization and consisting of basic wage or salary, incentives or bonus together with any benefits.

Compensation management provides a systematic approach to for designing the salary administration system that recognizes performance of employees, efforts of teamwork, requirements of the job and job related skills and knowledge (Henderson, 2007).

Ivancevich (2003) has suggested that pay surveys are used prerequisite before setting the compensation packages in the organization.

Superior pay surveys endow with clear and precise job descriptions, give a clear course of job evaluation and provide the data on basic pay of each job, bonuses as well as the entire compensation. (Ivancevich, 2003*)*

Martocchio (2006) has described the following elements of core compensation:

- Base Pay
    - Hourly pay
    - Annually pay
- How base pay is adjusted over time
    - Cost of living adjustment
    - Seniority pay
    - Merit pay
    - Incentive pay
    - Pay for knowledge and skill based

Source of determining pay of an individual:

Ivancevich (2003) suggests the following two ways to determine the pay of an individual:

Firstly, Management needs to answer the following questions:

- *When same job is held by two employees?*
- *How they should be paid relative to each other?*
- *Is it suitable to pay all the employees doing the same job at the same level?*

Secondly, if the answer is that it is not suitable, then on what basis the distinction should be designed?

Ivancevich (2003) has explained that the differences in pay of individuals are based

on:

- Variation in experience skills and perform the tasks
- Seniority, higher performance or a mingle of both
- Distinction in contributions to the organizational goals
- Changes in the job roles, skills, knowledge etc.

If the degree of difference in pay is missing, the compensation system will upset the internal norms of employees and increase dissatisfaction and attraction and retention of employees will not be easier.

Modes of payments:

Byers and Rue (2006) suggests that the employees can be compensated on the basis of time spent on place of work, the output produced or knowledge, skills and competencies of the employee. It can be combination of these factors. These are flat rates, time based payments, incentives, executive pay, employee benefits and team based pay/incentives. Flat rates are the wages determined by collective bargaining and same flat rate is offered instead of different rates. Time-based is the form of payment not related to the output or performance of an individual and includes wages and salaries. Wage is the calculation of pay on the basis of hourly rate. Salary is the calculation of pay associated to annual or monthly rate rather than hourly rate. Along with base wage or salary, additional rewards to the employee with subject to performance are also provided called as incentive. (Byers and Rue, 2006)

Executive pay is the pay related to those employees who are directly involved in decision making committee of top management level.

Employee benefits:

Employee benefits, also known as fringe benefits, not related to the employee performance instead they are provided on acquiring a position in the organization and for being a part of it. (Ivancevich, 2003)

ISSN 2076-9202

Milkovich (2002) has further added that employee benefits are appreciated and can lead to employee satisfaction.

Ivancevich (2003) has also stressed that besides individual compensation, team based incentives are also provided in situations when it is not an easy task to measure output of each individual, specially when a project or task requirement is mutual effort and on the choice of employer or management.

Lump-Sum Awards

Lump-sum awards are one time cash awards and not included in the base pay of the employee. This is a merit pay award and results in the increase in cost for the employers. (Milkovich, 2002)

Profit Sharing

Milkovich (2002) has cited Zalusky that unions have argued for profit sharing for more than 90 years. The concept of profit sharing can also be seen in SLIC where profits are shared with the employees and a fixed percentage of employee's basic pay is shared to.

Types of compensation System

Pandita (2011) has explained following two types of compensation system:

a) Direct compensation

b) Indirect compensation

a) Direct compensation

Direct compensation is the compensation includes salary along with health facilities and consists of basic salary along with house rent allowances, medical benefits, city allowances, Conveyance, provident fund, bonus and payment for holidays etc.

b) Indirect compensation

Pandita (2011) pointed out that indirect compensation comprises of non monetary benefits like rewards, recognition, responsibilities and promotions etc. It encourages the employees and motivates them for better performance. It enhances the internal satisfaction of the employees because their wok is appreciated and valued by the organization.

Advantages of Compensation

Compensation is the game of getting and spending. This exchange can be in monetary term or in non monetary term. Pandita (2011) has explained that compensation helps to motivate and retain the key and talented employees and can help out the organization in the following ways:

Job satisfaction:

A superior compensation package against their contribution they will be highly satisfied and committed to their job.

Motivation:

Individuals have different needs. Some people work for money while others consider achievements more valuable than money. Organizations have to pay more to the former and provide more learning, development and promotions to the latter.

ISSN 2076-9202

Low absenteeism:

Employee satisfaction leads to the job commitment and employees enjoy their work which results in low absenteeism.

Low turnover:

When any organization pays a fair compensation package to their employees, then it reduces the chances for employee turnover which eventually results on lowering the cost of turnover.

Research Methodology

This exploratory research was supported by survey strategy and was conducted to identify the key issues regarding compensation management in the semi government of Pakistan. SLIC was taken as case. In-depth face-to-face interviews and questionnaires were used as key sources of collecting the primary data. The cluster sampling method was used in this research and two clusters, staff and managers, were selected. Sample of size 25 were selected through simple random sampling.

A comprehensive questionnaire consisting of 15 questions including space for suggestions was designed in order to get detailed insight of compensation issues in BWP Zone of SLIC. 25 valid questionnaires were analyzed in terms of graphs and percentages by using Microsoft excel.

The results of the questionnaire were discussed to identify which factors create problems related to compensation and what were the possible solutions. In order to increase reliability of current research, in depth face-to-face interviews were also been conducted from 8 managers and 4 staff members of SLIC.

Findings and Discussion

The survey was conducted in the Bahawalpur Zone of SLIC and profile of the

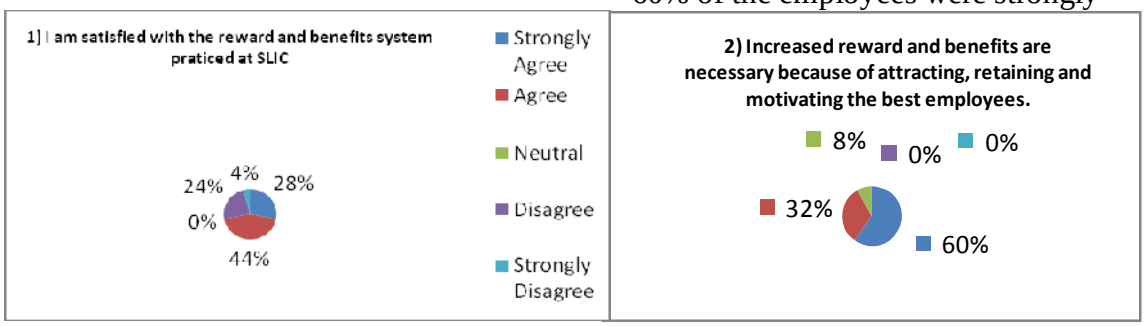
respondents included: zonal head, managers, assistant managers, deputy managers and staff members.

The level of experience of respondents showed that 52% of respondents were having more than 15-20 years of experience. 25% of respondents were having 5-15 years experience and only 20% respondents were having less than 5 years experience. All the respondents were male as male employees are dominant in SLIC. 20% of them were young with age 20-30 years.

On the level of job, 64% of respondents were from the management side and 36% respondents were from staff or worker's side.

On the level of satisfaction regarding compensation, 28% of employees were highly satisfied about their compensation package. 44% were agreed about the reward and benefits system practiced at SLIC. Some employees were dissatisfied with their compensation packages and their percentage was 24%. Typically these employees were having more qualification and experience but less salaries. 4% of the whole respondents were highly dissatisfied with their compensation packages (as shown in figure 1) as they were also having either more qualification or more experience or both.

60% of the employees were strongly



agree that reward and benefits should be high to

Figure 1

attract, retain and motivate the best employees. 32% of the employees were also

having the same opinion that elevated benefits and rewards are prerequisite of employee attraction, retention, and motivation. 8% respondents were neutral about the statement (Figure 1). Those talented employees having more performance but not satisfied with their compensation packages leave the corporation. Thus employee retention could also be increased by adjusting compensation.

One thing can be seen that key to employee retention, satisfaction and motivation is reward and benefits. If reward and benefits are increased, employees can put more efforts and more of their potential to the jobs and thus more committed to their jobs. 52% of the respondents were agreed and 20% of the respondents were highly satisfied with the statement that employees are rewarded because of their outstanding performance. This is true in marketing division where every employee of the SLIC receives reward and benefits according to his/her performance. 20% were disagreeing because their salary was not according to their performance. The research was conducted

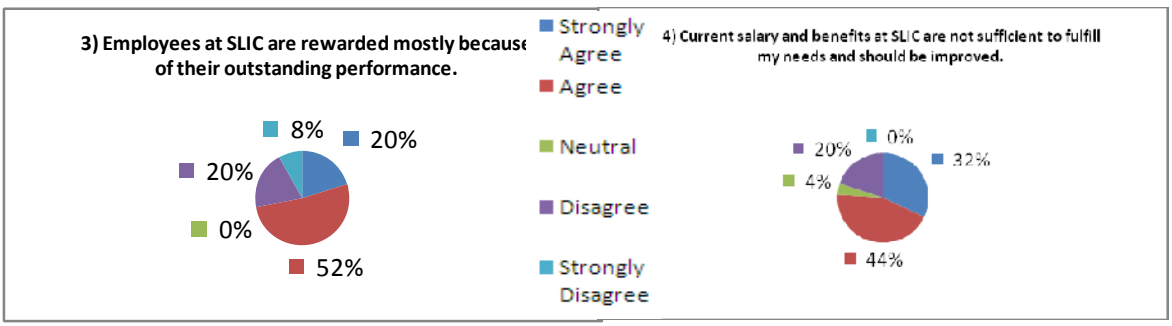


Figure 2

in the admin division of the SLIC where employees are rewarded according to the time they spent on their job and very little emphasis on performance based pay. Research revealed that compensation packages of most of the employees are not able to fulfill their needs and should be improved. 44% of the respondents were agreed

with the said statement and 32% were highly coincides with the improvement in their salary (Figure 2).

It is also worth noting point here that employees of developing countries like Pakistan are conscious about their needs and they want to make their future financially secure to avoid any uncertain situation.

There was equal response on the statement that "all the employees are eligible for rewards and bonuses at SLIC". 32 % were agreed and 32 % were disagreed about the said statement. Here it was observed that the respondents, who were disagreed, were those having outstanding performance than others but receives the benefits same as others and the respondents, who were agreed, were lazy workers but enjoyed the same benefits. Due to this unequal compensation, biasness was in attendance among the efficient and non-efficient employees.(Figure 3)

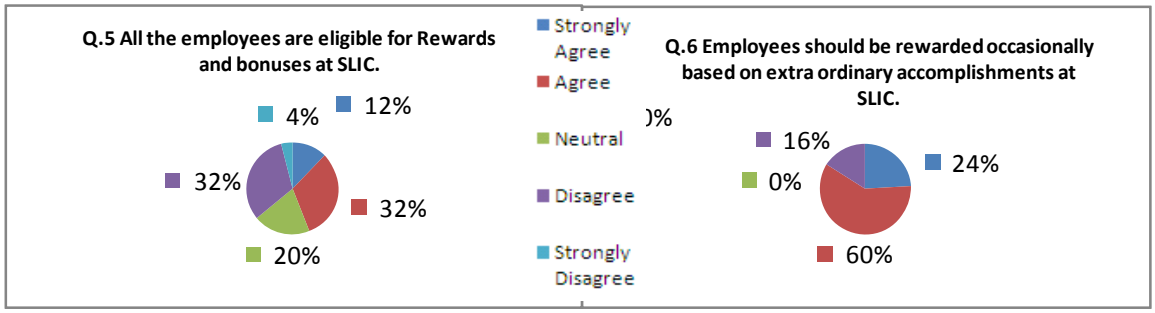


Figure 3

The research revealed that employees should be rewarded on the basis of extraordinary performance so that they could be encouraged and more motivated to achieve the organizational goals. The salary package of employees is more in comparison to the other competitors but does not reflect the performance of the employees.

Most of the respondents believed corporation's ability ton pay is more and its profit does not reflect the compensation package of the employees. The study shows that

48% of the respondents were disagreed that attractive compensation are challenge for corporation.

Most of the respondents were considered that their salary was not up to their performance as 56% of their respondents believed that their performance is more than that of their pay.

Here it can be concluded that most of the employees in the organizations are more concerned about performance based pay than the time based pay.

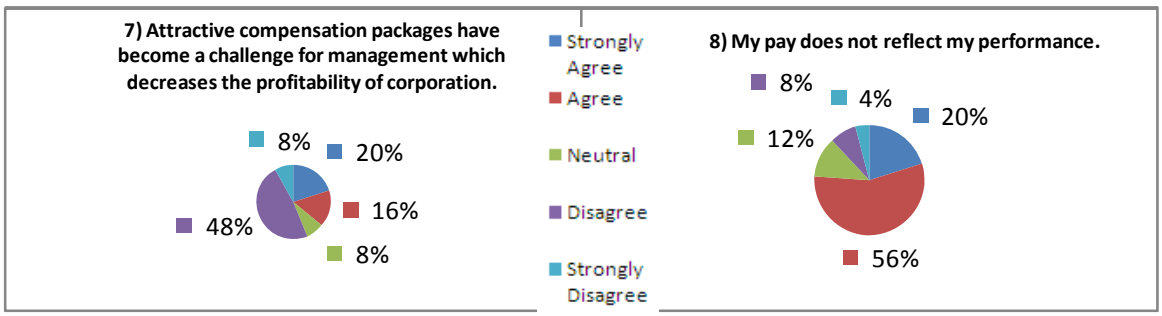
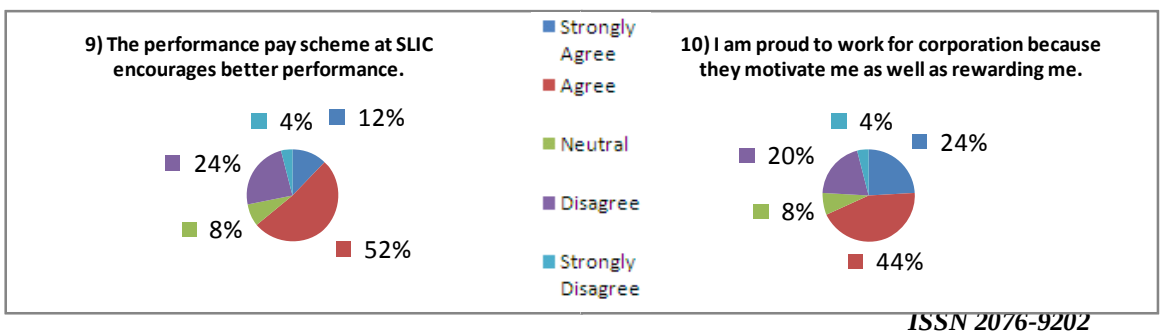


Figure 4

56% of the whole respondents deemed that performance based pay at SLIC enables the employees utilize their full potential and to increase their performance.

Next issue regarding the employee satisfaction with their compensation packages was the reward system practiced in SLIC. 44% respondents were satisfied with the SLIC because of the reward system. 20% were not having the same opinion and have the more performance with less motivation, encouragement and reward from the SLIC. (Figure 5)



ISSN 2076-9202

Figure 5

There were employees having years of experience and qualification but not promoted. Promotion is the main problem and thus source of discouragement for the senior employees. Most of the employees in the government and semi government sector have to wait for years for their promotion.

SLIC gives 3 bonuses annually to encourage the employees with subject to the achievement of goals. This is why 56% of the respondents acknowledge this encouragement from the corporation. But still 64% of the respondents viewed that management should pay more attention to the rewards so that they could be able to contribute their best in the achievement of overall goals.

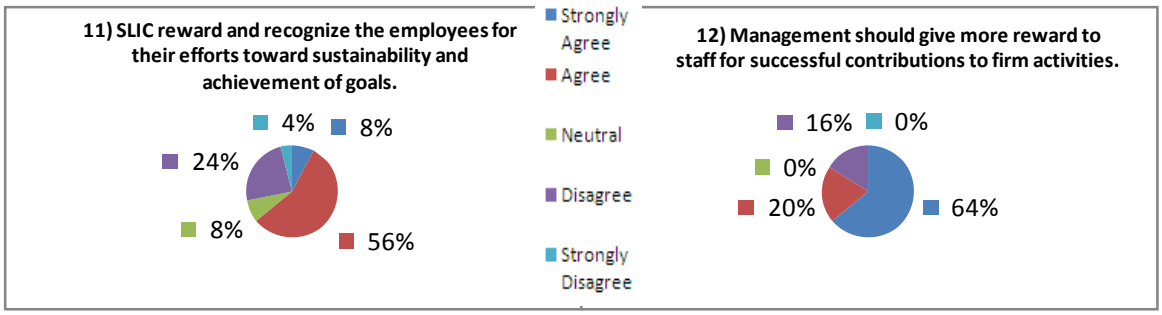


Figure 6

While discussing the issue of profitability of the work performed, 36% respondents were strongly agreed and 52% respondents were also have the same opinion that management should pay more concentration on this issue so that quality work should be encouraged.

About 44% respondents were having the strong opinion that higher compensation encourages the employee satisfaction, quality work and results in the increased performance of the employees as well as organization as a whole. 52% respondents were also having similar thoughts and believed that to increase the organizational performance, management should pay attention to the compensation. But employees receive very less facilities on the job that affects their performance. Also the number

of employees were less and workload was more causing the stress among the employees. (Figure 7)

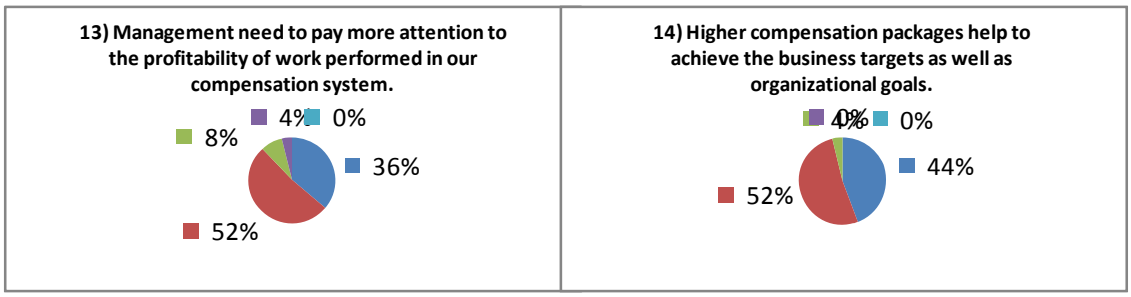


Figure 7

Most of the respondents have the idea ab their pay can progress. 56% respondents were known about their pay (as seen in Figure 8). Pay of the employees usually increase after two ye ıve no link with budget. Pay of the management level employees increases in the first year and pay of the staff increases in the second year. The pay increase usually results because of the negotiation between worker union and management. The worker union of SLIC is strong and has more negotiation power which results about 50% of pay increase after two years. Similarly, managerial level employees have association to bargain their demands with the directors of Principal Office (Head Office). More the pressure exerts on chairman from the union, more will be pay increase. No cost of living or inflation is considered.

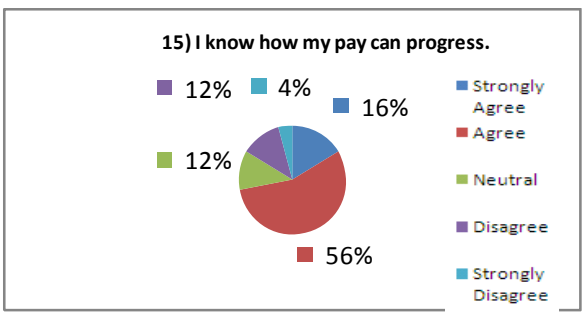


Figure 8

But worker's union is stronger than the management's association which results in unfair compensation packages like staff members receives child education allowance which is not given to the managerial cadre employees. Similarly overtime rate (varies from Rs.80-150) of staff is more than management employees (fix Rs.100). There is no change in salary with the change in profit of the corporation but annual bonuses affect from the profitability of SLIC. If the profit of SLIC is less than expected, employees are not rewarded with bonuses. But if the profit of corporation is up to or more than expectations, a bonus of near about 2.47% of the basic pay is awarded to the employees. Moreover, employees are also rewarded in relation to their qualification. More the qualification, more will be allowances and chances of promotion.

Suggestions & Recommendations

On the basis of the research study, the researcher has proposed following improvements in the corporation:

- Employees should be involved in decisions affecting them
- Promotions and rewards should be fair and based on performance
- Total Quality Management approach should be used to compensate the employees
- New talented/professionals should be encouraged and retained
- More work facilities should be provided to increase the performance of the employees
- Motivational tools should be used to motivate the managers and staff members
- Number of employees should be increased to reduce the work burden and work stress from the employees
- In addition to experience, the promotion should also be based on the basis of education and performance of the employees
- There should be more career development programs for employees

ISSN 2076-9202

Conclusion

The research study has revealed that management can use different tactics to encourage the employees and to increase their performance to achieve the business results, but different tactics affect differently to the employees. Some employees are motivated by the pay increase while others need promotion.

Performance base pay is superlative wage method to reward the employees which not only reward the efficient employees but also help to decrease the biasness among the efficient and inefficient workers. Moreover, work related facilities enable the employees to polish their performance and thus lead to job commitment and employee satisfaction.

Organizations need to identify the talented employees so that they can be trained and promoted in future at right place and right time. According to respondents, senior employees need promotion for their retention and motivation and less experienced employees need pay increase for their satisfaction.

References

1. Henderson, Richard I. (2007), *Compensation Management in a Knowledge-Based World,* 10th ed., New Delhi: Dorling Kindersley.
2. Martocchio, Joseph J. (2006), *Strategic Compensation,* 3rd ed., New Delhi: Dorling Kindersley.
3. Milkovich, George T. and Newman, Jerry M. (2004), *Compensation,* 7th ed., Singapore: McGraw-Hill.
4. Bret Becton, M. S. (N/D), *An Overview of Recent Trends in Incentive Pay Programs,* The Coastal Business Journal.
5. Byars, Lloyd L. and Rue, Leslie W. (2006), *Human Resource Management*, 8th ed., New York: McGraw Hill/Irwin

6. Ivancevich, John M. (2003), *Human Resource Management,* 9th ed., Singapore: McGraw Hill

7. Pandita, Rahul. (2011, February 4). *What is compensation management*. Retrieved from http://www.buzzle.com/articles/what-is-compensation-management.html

ISSN 2076-9202

Entrepreneurship as a learning process: Ambanis' as the 20th Century entrepreneurs of India

Abstract: This study provides insights into the characteristics and behaviour of entrepreneurs. The study emphasizes the role of experience in entrepreneurship. The main focus is to illustrate how entrepreneurs can use their previous entrepreneurial experiences in their entrepreneurial career. The case introduced in this paper is that of young Indian entrepreneur(s).

His story fits to some of the earlier findings in the field, but it also offer new
insights into earlier results. Results show that the entrepreneur in question firmly and continuously exploited entrepreneurial learning and experiences in his entrepreneurial career. When moving to new business in a new industry, the entrepreneur may be capable of thinking 'outside the box', and hence to innovate. Findings also suggest that a new generation of entrepreneurs, with less risk-averse approaches to entrepreneurship may enhance more positive attitudes about entrepreneurship in general.

Keywords: case study; entrepreneurial learning; entrepreneur.

Reference to this paper should be made as follows

Biographical note: Dr. V. R. Salkute is Asstt. Zonal Manager at NSFDC Zonal Office at Bangalore. He received his PhD in Business Management from RTM Nagpur University, Nagpur. He researches in E-Commerce, SCM, etc.

1 Introduction

Creating a new venture is not so simple task that just anyone can do it. Moreover, those individuals who really have the potential to become successful entrepreneurs often do not do so (Bratnicki et al., 2005). However, those individuals who decide to start a new business face many

challenges. During the start-up phase, entrepreneurs usually face new hurdles, such as the need to acquire financing and know-how concerning bureaucracy and the creation of customer relationships. In addition, the risk of failure always looms in the life of an entrepreneur. Some of the entrepreneurs give up when they face a major failure in their business (e.g. Bratnicki et al., 2005). However, there are also those who take a failure (or just a closure of their company) as a learning process and are almost immediately ready to start a new business. These people can be called serial entrepreneurs, i.e. a subgroup of habitual entrepreneurs (e.g. Westhead and Wright, 1998a). This study will focus on entrepreneurship as a learning process with insights of Indian Entreprenuer.

This paper is structured as follows: In the next section, the concept of serial entrepreneurship is introduced. Then, serial entrepreneurship is considered from the viewpoint of entrepreneurial learning. In the subsequent sections, a single case study from India are reviewed. Finally, some conclusions are presented.

2 The concept of the serial entrepreneur

Entrepreneurship does not necessarily mean a commitment to only one company for the duration of the entire entrepreneurial career (e.g. Cooper and Dunkelberg, 1987; Rosa, 1998; Ucbasaran et al., 2003). Many entrepreneurs have owned and managed several companies, either temporally (one after another) or simultaneously. The first company may open new opportunities which may not have been available otherwise or went unnoticed (Ronstadt, 1988) and these opportunities may have been better exploited through a new company. Thus, the career of an entrepreneur does not always equal the life cycle of the company he/she has found or bought.

According to MacMillan (1986), the habitual entrepreneur is a person who has founded several companies and who has simultaneously committed to at least two. Habitual entrepreneurs deserve scholarly attention because of their importance in helping us to understand the entrepreneurial process. MacMillan (1986) argues that habitual entrepreneurs, more than the one-shot entrepreneurs, have had ‘the opportunity to learn how to efficiently and swiftly overcome the

stumbling blocks they encountered in their first efforts'. Thus, they have accumulated entrepreneurial skills from their experiences.

By studying these entrepreneurs, it would be possible to uncover and codify their 'skills and techniques' and gain a deeper understanding of the process of business creation. This view is echoed by other authors (see e.g. Donckels et al., 1987; Starr and Bygrave, 1991; Rosa, 1998).

Habitual entrepreneurs can be divided into serial and portfolio entrepreneurs
(Kolvereid and Bulvåg, 1993; Hall, 1995; Westhead et al., 2004). Their classification is based on whether they own their companies temporally one after another or simultaneously. Westhead and Wright (1998a) define the habitual entrepreneurs in a versatile way by suggesting that the portfolio entrepreneur founds, inherits or buys a new company along with the original, whereas the serial entrepreneur founds, inherits or buys a new company after selling or closing his/her original company. Therefore, the typical serial entrepreneur creates a company, improves it to a certain stage and then moves on to start another company. Lately, serial entrepreneurs have been found especially in the high technology industries (Lewis, 2000).

Previous experience from entrepreneurship may facilitate the recognition of new opportunities. The managerial and technical knowledge accumulated during the years together with the already existing networks may enhance the ability to exploit these opportunities (Westhead et al., 2004). With entrepreneurial experience, it is possible to recognise the measures needed to develop the business and the networks enable the access to the needed information and assure the resources, additionally reducing the disadvantages of novelty and lack of size (Starr and Bygrave, 1991). However, it should be noted that previous entrepreneurial experience does not necessarily lead to a success in future business and it is misconceiving to assume that experienced entrepreneurs always succeed better than beginners (Schollhammer, 1991).

Previous research suggests that prior entrepreneurial experience often lowers the threshold to become an entrepreneur and facilitates starting a new business. Factors behind serial entrepreneurship have gained

increasing attention during the last decade.

Westhead et al. (2004) argued that one reason for serial entrepreneurship may be that the entrepreneur is unable to develop his/her original company. On the other hand, Wickham (2001) states that the reason may also be the entrepreneur's willingness to maximize profit by selling the company. Some studies have suggested that serial entrepreneurs are often cautious and they experience non-specific situations and uncertainty as threatening (e.g. Westhead et al. 2004). On the contrary, Westhead et al. (2005b) suggest that the strengths of a serial entrepreneur are often connected to a certain expertise whereas outside help may be needed in exploiting the market and commercialising the know-how.
A serial entrepreneur is defined both by his/her aspirations and by his/her ability to go ahead and live by them. Employees with past experience as an entrepreneur are more likely to have aspirations to start a business of their own than those without such experience. These results also support the finding that past experiences as an entrepreneur is a significant explanatory variable for the current status as an entrepreneur or for a transition into entrepreneurship (e.g. Carroll and Mosakowski, 1987; Evans and Leighton, 1989; Shane and Khurana, 2003; Henley, 2004).
.

3 Serial entrepreneurs and entrepreneurial learning

Starting a new venture can be perceived as an active learning process. The actual learning during this period is the property of entrepreneur regardless of whether or not the venture continues operating (Bates, 2005). An entrepreneur decides to close the company if the opportunity is not worth further exploitation. In this instance, it is interesting to note whether or not the entrepreneur utilises the knowledge achieved in forming the new company. Unfortunately, in many cases, entrepreneurs do not utilise the favourable experiences of their previous companies in their further entrepreneurial career. This can be the case especially when the entrepreneur's recent company has failed. Hence negative experiences, such as failure, may have a remarkable influence on entrepreneurial potential. As such failure can also influence to the entrepreneur's attitudes so that he/she will try to avoid failure at all costs in the future. This is a threat to the entrepreneurial process for many reasons. One extreme example of this can be the complete abandonment of entrepreneurship.

Another example is that morbid willingness to avoid failure can act as a failure catalyst (Bratnicki et al., 2005). In other words, when the entrepreneur does not have enough tolerance for risk taking, there is the possibility that the competitors will, for example develop better selling products or services and as a result, the risk-avoiding entrepreneur will lose his/her market share.

Individuals who can learn from the failure are more likely to become serial entrepreneurs. On the other hand, we have to keep in mind that not all serial
entrepreneurs face failures. There are also those who exit their previous companies because they see that the current situation is good for selling the company or they just want to experience the excitement of the starting phase again. Thus, pure boredom to the routines in operating a company in a mature phase of its life cycle may be the reason for exit. As a result, the traditional view of failure is compared to a newer one, which highlights the willingness to learn from the failure (e.g. Cardon and McGrath, 2001).

Entrepreneurial decisions are functions of instinct and knowledge: i.e. the entrepreneur's specific knowledge about the market and his/her general knowledge concerning entrepreneurship (how to be entrepreneurial). According to Minnitti and Bygrave (2001), this general knowledge of how to be entrepreneurial is acquired only through learning by doing and by direct observation. However, there are only a limited number of studies concerning the learning available when the phenomenon is approached from the viewpoint of entrepreneurial learning. Although there are many studies published from the viewpoint of organisational learning, they do not necessarily fit very well with the phenomenon of learning in small companies.

Entrepreneurial learning can be described as a continuous process that enhances the development of necessary knowledge for being efficient in starting up and maintaining new companies. Bratnicki et al. (2005) suggest that entrepreneurial learning involves not only 'knowing' but also actively 'doing' and understanding 'what it is that works'. Hence, entrepreneurial learning combines knowing, acting and sense making.

ISSN 2076-9202

Obviously, each entrepreneur has some kind of experience in stock when establishing his/her business. In addition these stocks are, at least at some level, unique. This experience can be achieved through education, work-life, hobbies, etc. In general, the previous experiences shape the individual's ability to learn and consequently, learning can be seen as a path-dependent process that cumulates the knowledge on certain issues (Bratnicki et al., 2005). What is learned in one period builds upon previous knowledge (Minnitti and Bygrave, 2001). In addition, entrepreneurs learn continuously about themselves, the management and/or the industry. Additionally, they learn how to recognise and act on opportunities and how to cope with the liabilities of newness (Cope, 2005).

The entrepreneurial learning process consists of the three main components. These are the entrepreneur's career experience, the transformation process and entrepreneurial knowledge in terms of effectiveness in recognising and acting on entrepreneurial opportunities and coping with the liabilities of newness.

The case study focuses on one Indian entrepreneur. His entrepreneurial career includes several different companies and challenges which have taught him different sides of business and hence also influenced him as an entrepreneur.

In this study, the case is considered as unusual, rare or critical thus being suitable for a single-case study.

5 The case study

The entrepreneur in this case has developed his entrepreneurial experience through the relatively large number of firms he has owned. Different events which he has faced during his career as an entrepreneur have influenced the management of his present company. He has faced many successes and failures which can be considered as efficient sources of entrepreneurial learning. Main emphasis will be given to the entrepreneurial learning process.

1. Background of the entrepreneurs

a) Dhirubhai Ambani: Dhirubhai Ambani was the most enterprising Indian entrepreneur. His life journey is reminiscent of the rags to riches story. He is remembered as the one who rewrote Indian corporate history and built a truly global corporate group.

Dhiru Bhai Ambani built India's largest private sector company.
Dhirubhai Ambani alias Dhirajlal Hirachand Ambani was born on December 28, 1932, at Chorwad, Gujarat, into a Modh family. His father was a school teacher. Dhirubhai Ambani started his entrepreneurial career by selling "bhajias" to pilgrims in Mount Girnar over the weekends.

After doing his matriculation at the age of 16, Dhirubhai moved to Aden, Yemen. He worked there as a gas-station attendant, and as a clerk in an oil company. He returned to India in 1958 with Rs 50,000 and set up a textile Company.

Dhirubhai Ambani died on July 6, 2002, at Mumbai. He has two sons, Mukesh and Anil.

Reliance was founded as a textile mill in 1966 by Dhirubhai H. Ambani, the founder Chairman of the Reliance group. It continued to be a textile company until the early eighties.

Reliance later started seizing opportunities thrown up by a combination of the growing Indian economy and the opening up of the regulation-driven sectors of the economy. These included petrochemicals and plastics. Beginning with the early eighties, Reliance pursued a policy of backward integration from textiles as well as diversification. It set up world-scale facilities for manufacturing polyester and textile intermediates, plastics and polymer intermediates, detergent intermediates, etc.

He was probably the first Indian businessman to recognise the strategic significance of investors and discover the vast untapped potential of the capital markets and channelise it for the growth and development of industry. He was supremely confident that finance would never be a constraint in executing his projects because, as he said proudly, Indian investors would provide him with the necessary resources.

ISSN 2076-9202

And the investors never let him down. Shri Dhirubhai Ambani succeeded in creating an investor base of historic proportions for the Reliance Group. An unbreakable bond of implicit trust existed between him and the shareholders. They placed their savings in his care and he worked with unflinching sincerity to get them the best returns. He brought happiness and prosperity into the homes of millions of investors

For him, his people were his most important asset. He scouted around for the best and most talented professionals, nurtured them and continuously propelled them to aim for still higher goals. These highly motivated people comprise the core of what he named: "The Reliance Family".

Shri Dhirubhai Ambani visualised the growth of Reliance as an integral part of his grand vision for India. He was convinced that India could become an economic superpower within a short period of time and wanted Reliance to play an important role in realising this goal.

b) Anil Ambani: Born on June 4, 1959, Anil Ambani did his Bachelors in Science from the University of Bombay and Masters in Business Administration in the Wharton School at the University of Pennsylvania.

Anil Ambani joined Reliance in 1983 as Co-Chief Executive Officer. He pioneered India Inc's forays into overseas capital markets with international public offerings of global depository receipts, convertibles and bonds. Starting from 1991, he led Reliance in its efforts to raise, around US$2 billion from overseas financial markets. In January 1997, the 100-year Yankee bond issue was launched under his stewards

c) Mukesh Ambani :Mukesh Ambani is the face of new emerging India. Mukesh Ambani was born on April 19, 1957 in Mumbai. His father Dhirubhai Ambani was then a small businessman who later on rose to become one of the legends of Indian industry. Mukesh Ambani did his Bachelors in Chemical Engineering from University of Bombay and Masters in Business Administration from Stanford University, USA.

Mukesh Ambani joined Reliance in 1981 and was the brain behind Reliance's backward integration from textiles into polyester fibres and further into petrochemicals. During the process of backward integration, Mukesh Ambani led the creation of 51 new, world-class manufacturing facilities involving diverse technologies that raised Reliance's manufacturing capacities manifold.

World's largest grassroots petroleum refinery at Jamnagar is the brainchild of Mukesh Ambani. He was also the incharge of Dhirubhai's dream project Reliance Infocomm. But after the split in the Reliance Empire, Reliance Infocomm went to his brother Anil Ambani. Mukesh Ambani is now planning to enter retail sector in a big way. He has plans to establish big retail stores all over the country. Recently, he also entered into an agreement with Haryana Government to establish a Special Economic Zone (SEZ) with an investment running into thousands of crores.

Mukesh Ambani has many achievements and honours to his name. Mukesh Ambani was chosen as the ET Business leader of the Year 2006. He was ranked 42nd among the World's Most Respected Business Leaders and second among the four Indian CEOs featured in a survey conducted by PricewaterhouseCoopers and published in Financial Times, London, November 2004. He was conferred the World Communication Award for the Most Influential Person in Telecommunications in 2004 by Total Telecom, October, 2004. Mukesh Ambani was also conferred the Asia Society Leadership Award by the Asia Society, Washington D.C., USA,

2. Company from Scrach

Created an equity cult in the Indian capita l market. Reliance is the first Indian company to feature in Forbes 500 list . Assisted by his two sons, Mukesh and Anil, Dhiru Bhai Ambani built India's largest private sector company, Reliance India Limited, from a scratch. Over time his business has diversified into a core specialisation in petrochemicals with additional interests in telecommunications, information technology, energy, power,

retail, textiles, infrastructure services, capital markets, and logistics.

Dhirubhai Ambani is credited with shaping India's equity culture, attracting millions of retail investors in a market till then dominated by financial institutions. Dhirubhai revolutionised capital markets. From nothing, he generated billions of rupees in wealth for those who put their trust in his companies. His efforts helped create an 'equity cult' in the Indian capital market. With innovative instruments like the convertible debenture, Reliance quickly became a favorite of the stock market in the 1980s.

4. Findings

In 1992, Reliance became the first Indian company to raise money in global markets, its high credit-taking in international markets limited only by India's sovereign rating.

Reliance also became the first Indian company to feature in Forbes 500 list.
Dhirubhai Ambani was named the Indian Entrepreneur of the 20th Century by the Federation of Indian Chambers of Commerce and Industry (FICCI).

A poll conducted by The Times of India in 2000 voted him "greatest creator of wealth in the century".

6 Discussion

It is obvious that previous successes of the entrepreneur influence the development of entrepreneurial knowledge. Based on Ambanis versatile experiences, we can assume that his strengths as an entrepreneur are his courage, his opportunity-seeking skills related to sales and his marketing know-how. In addition, he is able to analyse his career and learning processes by himself. We can also assume that his academic background may have a positive impact to his analytical abilities.

Ambani seems to be an exceptional serial entrepreneur due both to his academic background and to the number of the businesses he has already

ISSN 2076-9202

owned at his young age. Ambani's also has some characteristics that challenge findings of the previous serial entrepreneurship studies. For example it is obvious that Ambani is not afraid to take risks. This is in contrast to some earlier studies that suggest that serial entrepreneurs are often risk averse and they experience non-specific and uncertain situations as threatening (e.g. Westhead et al., 2004). In addition, Westhead et al. (2005b) argued that serial entrepreneurs may need help in exploiting the market and commercialising the know-how, whereas they usually have know-how related to some particular industry.

However, Ambani's know-how is clearly based more to the sales and marketing skills than some industry-specific skills. Ambanis seems to enjoy challenges related to the establishment of new businesses in whole new industries. It seems that he is able to think 'outside the box', and hence to innovate. In other words, when starting up in a new industry, Ambanis is adapting skills he has learned from his former companies. Because he is not familiar with the business concepts traditionally used in the industry, he acts more innovatively than many of his competitors. Indeed, highly inventive individuals do not specialise in one particular field, they tend to be generalists, often pursuing two or three fields simultaneously, permitting them to cross boundaries and bringing different perspective to each (Root-Bernstein, 1989).

Ambani's case is a good example of attitude change taking place in India. It may be that Ambanis, with his background and adventurous attitude, is a forerunner of a new generation of entrepreneurs who see entrepreneurship more as an opportunity than as a risk.

References

Bates, T. (2005) 'Analysis of young small company's that have close: delineating successful from unsuccessful closures', *Journal of Business Venturing*, Vol. 20, No. 3, pp.343–358.

Bratnicki, M., Austen, A. and Gabrýs, B. (2005) 'How to become a serial entrepreneur: learning by failure and real options reasoning as drivers of entrepreneurial success', *RENT XIX Proceedings*. Italy.

Cardon, M. and McGrath, R. (2001) 'When the going gets though…toward a psychology of entrepreneurial failure and re-motivation', Paper presented at the Proceedings of the *2001 Bapson College- Kauffman Foundation Entrepreneurship Research Conference*.

Carroll, G. and Mosakowski, E. (1987) 'The career dynamics of self-employment'. *Administrative Science Quarterly*, Vol. 32, pp.570–589.

Cooper, A.C. and Dunkelberg, W.C. (1987) 'Entrepreneurial research: old questions, new answers and methodological issues'. *American Journal of Small Business*, Vol. 11, No. 3, pp.11–23.

Cope, J. (2005) 'Toward a dynamic learning perspective of entrepreneurship', *Entrepreneurship Theory and Practice*, Vol. 29 No.4, pp.373–97.

Donckels, R., Dupont, B. and Michel, P. (1987) 'Multiple business starters. Who? Why? What?', *Journal of Small Business and Entrepreneurship*, Vol. 5, pp.48–63.

Evans, D. and Leighton, L. (1989) 'Some empirical aspects of entrepreneurship', *AmericanEconomic Review*, Vol. 79, pp.519–535.

Henley, A. (2004) 'Self-employment status: The role of state dependence and initial circumstances', *Small Business Economics*, Vol. 22, pp.67–82.

Kolvereid, L. and Bullvåg, E. (1993) 'Novices versus experienced business founders: an exploratory investigation', In S. Birley and I.C. MacMilland. (Eds), *Entrepreneurship Research: Global Perspectives*. Amsterdam, The Netherlands: Elsevier Science Publisher, pp.275–285.

Lewis, M. (2000) 'The New New Thing: A Silicon Valley Story', New York, NY: W.W. Norton & Co., Inc. Littunen, H. (2001) 'The Birth and Success of New Companies in a Changing Environment', Jyväskylä Studies in Business and Economics. *Doctoral dissertation*. Jyväskylä*:* Jyväskylä University Printing house and ER-Paino Ky, Lievestuore.

MacMillan, I.A. (1986) 'To really learn about entrepreneurship, let's study habitual entrepreneurship', *Journal of Business Venturing*, Vol. 1, No. 3, pp.241–243.

Minnitti, M. and Bygrave, W. (2001) 'A dynamic model of entrepreneurial learning', *Entrepreneurship Theory and Practice*, Vol. 25, No. 3, pp.5–16.

Ronstadt, R. (1988) 'The corridor principle', *Journal of Business Venturing*, Vol. 3, No. 1, pp.31–40.

Rosa, P. (1998) 'Entrepreneurial processes of business cluster formation and growth by "Habitual" Entrepreneurs', *Entrepreneurship Theory & Practice*, Vol. 22, No. 4, pp.43–61.

Schollhammer, H. (1991), 'Incidence and determinants of multiple entrepreneurship', in N.C. Churchill, W.D. Bygrave, J.G. Covin, D.L. Sexton, D.P. Slevin, K.H. Vesper, W.E. Wetzel, Jr (Eds), *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA, pp.11–24.

Starr, J. and Bygrave, W. (1991) 'The Assets and Liabilities of Prior Start-Up Experience: An Exploratory Study of Multiple Venture Entrepreneurs', in Churchill, N.C., Bygrave, W.D., Covin, J.G., Sexton, D.L., Slevin, D.P., Vesper, K.H., Wetzel, W.E. Jr (Eds), *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA, pp. 213-227.

Westhead, P. and Wright, M. (1998a) 'Novice, portfolio, and serial founders: are they different?' *Journal of Business Venturing*, Vol. 13, pp.173–204.

ISSN 2076-9202

Westhead, P., Ucbasaran, D. and Wright, M. (2004) 'Experience and cognition: do novice, serial and portfolio entrepreneurs differ?' Working paper presented in *13th Nordic Conference on Small Business Research*.

Westhead, P., Ucbasaran, D. and Wright, M. (2005a) 'Experience and cognition: do novice, serial and portfolio entrepreneurs differ?' *International Small Business Journal*, Vol. 23, pp.72–98.

Westhead, P., Ucbasaran, D. and Wright, M. (2005b) 'Decisions, actions, and performance: do novice, Serial, and portfolio entrepreneurs differ?' *Journal of Small Business Management*, Vol. 43, pp.393–417.

Wickham, P.A. (2001) *Strategic entrepreneurship: A Decision-making approach to New Venture Creation and Management* (2nd ed.), Harlow, England, Pearson Education Limited.

ISSN 2076-9202

Entrepreneurship as a Career Option: A Review of Entrepreneurial Intention among Graduate Students.

Dr. Mohsin Shaikh
Professor & Head
Department of Management Studies
Smt. Kashibai Navale College of Engineering, Pune
Email:hodmba.skncoe@sinhgad.edu

Abstract: Careers are important for every individual as they constitute a variety of benefits and functions that color the individuals life. The process of choosing a career is greatly influenced by several factors and involves making a complex and time consuming decision. It is made more complex by continuous competition, open mindness towards suitability for a preferred career and perseverance in the chosen career. Careers in entrepreneurship are growing due to the fact that they offer endless opportunities. Research has revealed that attitude is an important determinant in an individual's success in entrepreneurship. The current paper attempts to review empirical studies on entrepreneurial intention among graduate students in general and management graduates in particular from across different countries and attempts to find out the factors attracting students towards entrepreneurial careers and suggest measures for fostering entrepreneurship among management graduates.

Key Words: Entrepreneurial Careers, Entrepreneurial Intention, Graduate Students, Fostering Entrepreneurship

Introduction: The number of graduates from government aided and private higher education institutions has been increasing each year and this proliferation exceeds the current demand for their services. There are times when due to economic change, the skills of new graduates do not match those needed by the employers. As a result the unemployment of these graduates becomes a problem. Today academic qualifications

can no longer guarantee immediate employment. In this context it has been proposed that graduates widen their career scope by investigating entrepreneurship as a possible career option. Entrepreneurship would help these new graduates develop their own career and also ease the burden of unemployment by expanding the job market. Entrepreneurship has been acknowledged by many researchers as a solution to the problem of unemployment.

Development in entrepreneurship has had notable effect on business world today. The government has always given attention to developing future entrepreneurs who are resilient and competitive in the global markets. A paradigm shift among management graduates is needed, as their contribution to entrepreneurship would stimulate country's economic growth.

This is especially important since management graduates are the academic intellectuals and have the skills to manage and develop business ventures. The current paper attempts to review recent empirical studies of entrepreneurial intention among management and business graduates in developing and developed countries. The aim of this paper is to find out the factors affecting the choice of entrepreneurship as a career and to suggest measures to foster entrepreneurship among management and business graduates.

Career Choice: Careers are important for every individual as they constitute a variety of benefits and functions that color the individuals life. The process of choosing a career is greatly influenced by various factors and involves making a complex and time consuming decision. Career choice is made more complex by continuous competition, open mindness towards suitability for a preferred career and perseverance in the chosen career. Careers in entrepreneurship are growing due to the fact that they offer endless opportunities. Like all other careers entrepreneurship has

its own unique level of develpment due to its involvement of different individuals and situations. Previous research has identified various factors that govern the choice of entrepreneurship as a career option. These can be divided into push and pull factors. The push factors include unemployment, job dissatisfaction, failure to obtain a promotion, being fired, economic downturn and survival pressures. (Alstete 2002, Mohd Saleh et al 2005). Pull factors include the need for freedom, trying new things, experience, availability of capital, skill and entrepreneurial capability, existence of role models, economic situations, and an individual's early preparation during employment. (Alstete 2002, Bird 1998, Mohd saleh et al 2005).Past studies have also observed that demographic, family, educational and motivational background have an indirect influence on choosing entrepreneurship as a career (Davidson 1995, Kuratka & Hodetts 2004). Research has also revealed that attitude is an important determinant of an individual's success in entrepreneurship. This is because choosing a career is said to be greatly influenced and stimulated by individuals own attitude. Attitude is a part of personality that is underpinned by belief and is able to evoke emotions that investigate specific behaviors.

Entrepreneurial Intention among Students: It has been widely accepted that the educational system of Universities has to provide an academic environment that may serve as a catalyst for high technology start ups. Until recently fostering innovation and new product development through entrepreneurship has not been regarded as a primary task of universities and colleges. However this perspective have changed and there have been numerous attempts to enhance the role of university and college graduates as founders of innovative business ventures.

A great deal of research has investigated the reasons for the creation of new enterprises and the entrepreneurial characteristics of those individuals responsible for

the emergence of new firms.Bhandari (2006) in his study on intention of entrepreneurship among business and management students in India found a significant relationship between luck and leadership and students intention to start business. The variables; to lead others, to be my own boss, to put my innovative ideas into practice; determination and personal challenge were significant factors that led students to venture into business. The study found no relation between student's family size, caste, parent's employment and income with their intention to start business.Furthere there was no relationship between student's major area of study and their intention to start their own business after completing their studies.

Othman and Ishak (2009) in their study of Malaysian students found that these students had a high inclination towards entrepreneurship, which in turn was related to high aspiration. They were also found to have a high attitude towards entrepreneurship in all the attitudinal component of achievement need, internal locus of control, competitiveness and monetary value. The regression analysis of the data collected by them showed significant relationship between attitude towards entrepreneurship and internal locus of control, monetary value and autonomy. Their findings showed that these factors inspire students towards entrepreneurship.

Fitzsimons & Douglas (2005) in their study of entrepreneurial attitudes and entrepreneurial intentions among MBA students in India,China,Thiland and Australia found that attitude towards ownership,income,independence,risk and work effort are significant in explaining an individual's entrepreneurial intentions. It was found that individuals in all four countries desired more income, more ownership, more independence and less risk in making a career decision. Income was identified as the most important attribute in an individual's choice between self employment and entrepreneurship. Many other studies have tried to find out the factors that attract students towards entrepreneurial careers.

ISSN 2076-9202

The following factors emerge from various studies on entrepreneurial intention among students

i) There is a growing inclination towards entrepreneurship among students

ii) Independence ,autonomy, achievement ,and internal locus of control are the major personality traits that influence students decision to venture into business

iii) Monetary value and financial rewards attract students towards entrepreneurial careers

iv) Demographic factors like age, gender,education,parents occupation and specialization do not have any significant relation with students intention to start a business

v) The environment and support in the colleges also have an impact on student's decision to start business.

Conclusion: Entrepreneurship today can be thought to be a viable and attractive career option. More and more students are now being inclined towards entrepreneurial careers. There has been a great interest in entrepreneurial intention of students among researchers and academic institutes. Universities and academic institutions can play a great role in fostering entrepreneurship by providing a supportive environment and necessary infrastructure that encourage entrepreneurship among potential entrepreneurs.

References:

ISSN 2076-9202

1) Alstete,J.W (2002), 'On Becoming an entrepreneur: An evolving Typology', *International Journal of Entrepreneurial Behavior and Research,Vol. 8 No. 4* pp222-234

2) Bhandari, N.C (2006), 'Intention for Entrepreneurship among Students in India', *The Journal of entrepreneurship, Vol 15, No. 2*, pp 169-179

3) Bird,B.J (1998), 'Implementing Entrepreneurial Ideas: The case for Intention', *Academy of Management review, Vol 13., No. 3* pp 21-29

4) Davidson (1995), 'Determinants of Entrepreneurial Intentions, Paper presented in RENT IX, *Workshop on Entrepreneurial Research*,Piancenza,Italy 23-24 November

5) Fitzsimmins,J.R & Douglas E.J (2005), 'Entrepreneurial Attitudes and Entrepreneurial Intentions: A Cross Cultural Study of Potential Entrepreneurs in India, China Thailand and Australia', *Paper Presented at Babson- Kaufman Entrepreneurial Research Conference,Wellesely*,M.A

6) FrankeN. Luthje,C. (2004), 'Entrepreneurial Intention of Business Students: A Benchmarking Study, *International Journal of Innovation and Technology Management,Vol 01 No. 03* pp 269-288

7) Kuratka D.F & Hodgetts R.N (2004), '*Entrepreneurship Theorey,Process and Practice*, 6th Edition Ohio, South Western Thompson

8) Nittykangas,H & Tervo ,H(2002), 'Intergenerational Mobility in Self Employment: A Regional Research Approach, *Paper presented in 42nd European Regional Science Association Congress*,Dortmand,21-22 august

9) Othman N.H & Ishak S.B (2009), 'Attitude Towards Choosing a Career in Entrepreneurship among Graduates', *European Journal of Social Sciences, Vol 10 No 3* pp 419-43

The Top Factors That Affect The Commercial Success Of High-Growth Companies

Andrew McCalister

University of Cambridge, Royal Academy of Engineering

1.Abstract

The National Venture Capital Association (U.S) recently released figures showing that $6.2Bn, £3.9Bn, (35%) of all Venture Capital goes to early stage businesses, however, only £151M (50%) of U.K Venture Capital goes to companies at the same stage. With most high-growth companies failing if they don't raise financing, obtaining a portion for this venture capital is important. Here we study the priorities companies should focus on as they grow, to improve the chances of commercial success and raising venture capital, are reported here.

Quantitative results show there are four priorities that consistently get ranked as the most influential. Combined these priorities are ranked most important 66% of the time in early stage companies and 70% in growth stage. The four priorities are: Market, ensuring the market is of great size ($1Bn and above) and growing, enabling the company to have enough room to pivot within the same market and still secure a large section of it. Technical Personnel, do they have appropriate technical background. Management, do they have prevalent experience in the market. Technical Enablers consisting of timescale to market, parallel technologies that had to be taken into consideration and differentiation in marketplace.

During the report the author discovered there are four priorities that can help maximize commercial success: Application & Market, Management, Technical Personnel and Technical Enablers. In addition the author made further observations that can have an effect on the commercial success of a company including community and quantity of local investment funds.

Executive Summary

The National Venture Capital Association (U.S) recently released figures showing that $6.2Bn,

ISSN 2076-9202

£3.9Bn, (35%) of all Venture Capital goes to early stage businesses, however, only $240M, £151M, (50%) of U.K Venture Capital goes to companies at the same stage. While there is a wide difference in the figures of investment, the U.K does have many public bodies that cover some of this disparity. While many of these agencies examine companies for investment, their focus is generally on the technical aspects rather than the commercial ability of the company. While technical aspects are obviously a worthwhile assessment it can affect companies when they reach their growth stage and attempt to obtain private investment if they are not prepared for commercial assessment.

This report combats the switch in assessment criteria by examining the difference in companies between the early and growth stages by identifying ten evaluation criteria, utilised by public and private funds, and then ranking the importance of the criteria in relation to the success of early and growth stage companies. In order to obtain the data points for such an evaluation the author travelled to Silicon Valley in order to interview highly successful companies and private investment funds. Interviewees included Marc Tarpenning, Co-Founder of Tesla Motors, and Timothy Draper, Founder and Managing Director at Draper Fisher Jurvetson. In total, the companies interviewed had raised over $930M from private funds (mostly based in Silicon Valley) and the private funds had over $12.5Bn under management.

The ten dimensions investigated include: Standards & Regulation; Technical Enablers: Competition; Market; Technical Personnel; Financial Enablers; Monetization; Knowledge Creation; Management and Business Model. Overall there were three dimensions that consistently got rated above the others. These were Market, Technical Personnel and Management, showing it is truly the Market and Team (Technical Personnel and Management) that make the difference when identifying a potentially successful company. Within these top three categories it became clear there was a difference in weighting between early and growth stage companies. Technical Personnel and Market were rated far higher in early stage companies while Management and Market were the top two for the growth stage.

These top three categories show where the focus should be when evaluating companies. Evaluation criteria for these points may include: Market, ensuring the market is of great size (£600M, $1Bn, and above) and growing, enabling the company to have enough room to pivot

ISSN 2076-9202

within the same market and still secure a large section of it. For early stage companies, Technical Personnel, what is their technical background and qualifications. Essentially do they have the skill set to build a top tier product. For growth stage companies, Management, do they have relevant experience in the market? Prior to investment the Management should be involved in real-time debates with the investment team about the plan of action and market forces. Assuming suitably in-depth knowledge of the market and product by the investors this should prove the capability of the Management.

During the authors tenure in Silicon Valley further learning points were noted. Firstly, previous failure does not seem to have an over-bearing effect on the future potential to obtain funding. Secondly, there is a distinct community, enabling personal introductions to entrepreneurs and investors, which allows funding rounds to happen at a quicker pace. Thirdly, the sheer quantity of investors in Silicon Valley enables higher valuations since entrepreneurs have the opportunity to gain term sheets of multiple investors in a short period of time, essentially starting a bidding war.

Introduction

The Harvard academics, Gompers and Lerner, stated “ninety percent of new entrepreneurial ventures that don’t attract venture capital within the first three years will fail”. Here we address the issues relating to the priorities high-growth companies should focus on in order to maximize the potential of raising future rounds of funding and eventually aiming for commercial success with a strong exit to either the public market or acquisition. We attempt a quantitative analysis, with over 25 top Silicon Valley companies and Venture Capitalists having rated 10 dimensions in order of importance to commercial success.

The importance of growing and obtaining funding is highlighted by the figure recently released by the National Venture Capital Association (U.S) showing that $6.2Bn, £3.9Bn, (35%) of all Venture funding in the U.S goes to early stage businesses, while in the U.K it is only £151M (50%). With such a strong Science and Technology, base the U.K needs to maximise its knowledge in relation to successful commercial exploitation.

We will discuss the issue as follows. Section 2 shall discuss work previously carried out in this area and how it was applicable to this research. Section 3 explains the methodology and data

collection techniques. The data gathered is analyzed in section 4 while section 5 details the findings.

2.Theoretical Development

Prior work

The formation of different phases in company growth is already well documented with the three main phases being Emerging, Growth and Maturity. These phases can be applied to different forms, from product development to industry growth (Abernathy and Utterback 1978, Utterback 1994). However, the growth phase is regarded as the most prominent and important (Mayer, Young & Ausubel 1999). Due to the focus on the later stages of Growth and Maturity (Phaal, O'Sullivan, et al. 2009) it has left the Early Stage largely void of research.

While the Early Stages have been left behind the later stages in knowledge acquisition, Suarez highlights it is the transition between the phases that is the key factor (Suarez 2003). This point was later emphasized by Phaal and O'Sullivan (Phaal, O'Sullivan, et al. 2009).

Aureswald and Barnscomb's 2003 paper 'Valleys of Death and Darwinian Seas' introduces the opinion that most Venture Capitalists invest at an early stage (Aureswald and Barnscomb, 2003). It is essential that new entrepreneurial ventures that need to raise finances do so, since 90% of the ventures that don't raise a finance round fail within three 3 years (Gompers & Lerner, 1999). This point is emphasized by Murphy and Edwards who have the opinion that without new capital most of the nations {UK} most promising entrepreneurs will fail.

However, obtaining this essential capital is no easy task and entrepreneurs should expect to be extensively scrutinized (Gompers & Lerner, 1999), showing that entrepreneurs who are raising need to be fully prepared for the mindset of the private investors. Many entrepreneurs find it hard to prepare for this commercial mindset of private investors since most have been introduced to the world of financing by public funding bodies that have a technological mindset (Murphy and Edwards 2003).

ISSN 2076-9202

Murphy and Edwards also attempted to give some solutions on how to prepare a company for private venture funding: Management, Market, Technology, Liquidity and Company Structure. However, this is based mainly on the perspective of the renewable energy industry.

Investigation

While research has been carried out in the later stages of company growth, very little has been done in terms of the early stages. This paper shall investigate the top priorities companies should focus on during this early phase in order to maximize the opportunity for commercial success. The importance of the transitions between the phases is also taken into consideration by investigating the top priorities in the growth stage, which can then be compared and contrasted against the early stage in order to create a guide for companies going through this transition.

To quantify the results and further expand the initial research carried out by Murphy and Edwards the paper will investigate whether there are a number of priorities that high-growth companies should focus on in order to enhance their ability to become a commercial success.

3.Methodology

Data Source

Our data was collected from twenty eight high-growth companies and venture capital firms based in Silicon Valley. They were selected due to their industry focus (web and cleantech) along with the amount of funding they had raised. In total the companies interviewed had raised over $930M (£600M) and the Venture Firms had over $12.5Bn (£7.8Bn under management). The full list of interviewees can be seen in Appendix A. The following nine steps were used in the interviews for the collection of all data:

1. Contacting potential interviewees with request for participating in the case study.
2. Sending interview guidelines to the interviewee.
3. Collecting external and internal data about the case as part of the interview preparation.

4. Conducting the interview, recording the conversation (if permitted) and taking notes in the interview notes template.
5. Asking for secondary internal material (where applicable) and for further internal and external contacts.
6. Analysing the audio files and digitising interview notes in the template.
7. Filling out contact summary form.
8. Conducting further case interviews (repeating 1 through 7 for each interview partner).
9. Conducting interviews to collect external data (where applicable).

The interviews were carried out to collect data about companies and investors that had experience of both early stage and growth stage companies. Early stage companies are defined as companies that have been around for less than two years and have raised less than $1M in funding. Growth companies are defined by being established for more that two years but less than ten, and have raised in excess of $2M.

Analytical approach.

A positivist research philosophy was taken emphasizing a semi-structured methodology to enable replication (Gill & Johnson, 1997) with quantifiable examination to allow statistical analysis to be carried out (Saunders et al, 2003).

It is understood that the personal characteristics of the interviews can skew the associated results, therefore precautions were taken to dilute such implications. Interviews were conducted with specific personnel whose position is constant over all companies. When possible they were carried out with the CEO or founder, otherwise another Executive position, enabling consistency over the answers and enhancing the statistical significance of the overall findings. This included interviewing as many stakeholders as possible in the time available in a diverse business range (from web applications to cleantech), who have broad experience (recent startups to successful businesses). Care was also taken to enable the full spectrum of success to be investigated; with interviews being carried out with company founders that have failed along with interviewees who have succeeded. In order to fully understand the success

ISSN 2076-9202

criteria interviews with private funds that have backed many of the startups/ established businesses were also carried out.

This spectrum of interviewees enabled enough data to be gathered in order to allow statistical analysis. However, due to the time scale of this project, the Life Sciences industry was not included in this line of interviews. This is due to the particularly long timescale to market (5 to 10 years) and distinct regulatory hurdles in comparison to the other industries. Where as Web, IT and Cleantech all have overlapping issues with reference to timescale and regulatory issues.

The interviews were semi-structured, allowing the interviewee to discuss areas of knowledge in more detail. Semi-structured interviews are based on predetermined questions while being kept flexible in their order and emphasis (Robson, 2002). The data collected was compiled into a graphical format to enable quantification of the results.

Dimensions of investigation

The ten dimensions listed below were the focal point of the investigation. These dimensions are an expansion of Murphy and Edwards research (Murphy & Edwards 2003) combined with prior research carried out by the authors that investigated the evaluation criteria of major European public funding bodies for high growth companies.

Each interviewee was asked to answer questions in five areas regarding the dimensions. Firstly they ranked the dimensions in respect to their importance to building a successful company (in relation to the stage, either early or growth, that they had most knowledge of), 10 being the most important, 1 the least - data point one.

Secondly, the interviewees were asked to split a total of 100 points between the dimensions in anyway they saw fit - data point two. The larger amount of points related to the more important dimension.

Thirdly, the interviewees were asked to comment on why they had ranked the top three dimensions so highly - data point three.

ISSN 2076-9202

In addition to obtaining the interviewees comments on the factors that create successful companies they were also asked, when applicable, to comment on what factors were the major influences in unsuccessful companies. For this, data points one and two were repeated, exchanging questions on success with failure. The outcome of these two final sections were used to compare and contrast against the outcome of the questioning around success.

The dimensions discussed and associated questions were:

1. Standards & Regulation: If there were any the company had to deal with? At what stage they were addressed?

2. Technical Enablers: Timescale to market, parallel technologies that had to be taken into consideration and differentiation in marketplace?

3. Competition: How the competition's potential future offerings are taken into account? If entering a mature market and how the company convinced customers to choose their offering over established competition?

4. Market: What is the size of the market and is it growing, declining or stable?

5. Technical Personnel: How it was identified someone with this expertise was required? At the very start was it wise to define between management and technical personnel? Was it preferred they had large company, startup or both types of previous experience?

6. Financial Enablers: Why were specific investors chosen (expertise or available capital)? If technology development/ market entry did not go as well as expected what contingency plans were in place? When approaching funding rounds are 'contingency funds' also included in the proposal. How important is it who the investors are?

7. Monetization: How and when will the product create revenue?

8. Knowledge Creation: How important was training? Did/ does the company push potential spin outs from the firm that may not focus on the company's core competence but could be a future partner?

9. Management: With current and previous management, how were they chosen? How did the management team intend to evolve as the company grows and how was that planned? When planning new management, at any stage of growth how did the company

ISSN 2076-9202

identify the skills it requires?

10. Business Model. How does the company plan to execute its plan? What time scales are involved and are there any specific allegiances that are essential? Who are the customers, how are they approached (direct, distribution) why was this method chosen? Evolution: how has this business model evolved as the company grows/ approaches market/ gets new investors/ management?

4. Analysis

Once the data was collected from the interviewees it was compiled into a database to enable analysis. This analysis consisted of three parts, the first (data point one) being sorting the interviewees rankings from one to ten for the separate dimensions into a logical format. This consisted of combining all the scores and then averaging them to obtain a final ranking for each dimension, where the higher the number the greater the importance of the dimension to a companies chance of success.

In order to analyze the difference between the dimensions further a second level of analysis (data point two) was carried out. This consisted of summing the total amount of points awarded to each dimension and then dividing it by the total number of points available to obtain a percentage. Interviewees were asked to split a total of 100 points between the dimensions as they see fit. The dimension with the highest score relates to the most influential in regards to a company's chance of success. The reason for this second level of detail was to obtain an understanding of the importance of each dimension beyond rankings. For example, two dimensions may have received a similar average rankings on data point one but there was no way to tell if there was a vast difference in importance between dimensions ranked second and third.

The final section of analysis (data point three) was combining the interviewees comments on why they ranked the top three so highly. This enables questions to be built around the reasons for high ranking. Each of these three sections was repeated for Early and Growth stage companies.

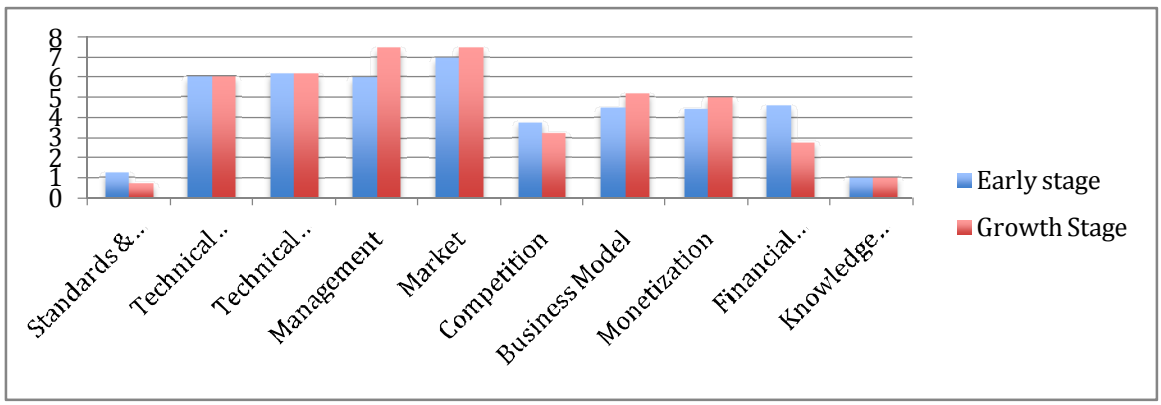
ISSN 2076-9202

Data point one can be seen below in table one. There are a number dimensions that consistently get ranked higher than others.

Standards & Regulation	1.25	0.7
Technical Enablers	6	6
Technical Personnel	6.2	6.2
Management	6	7.5
Market	7	7.5
Competition	3.75	3.2
Business Model	4.5	5.2
Monetization	4.4	5
Financial Enablers	4.6	2.8
Knowledge Creation	1	1

Table 1. The average ranking of the dimensions for the Early and Growth stages. Higher numbers relate to a greater importance of the dimension.

In order for the data to be visualized it is put in a graphical format, figure four.



In Figure four it can clearly be seen that a few of the dimensions consistently get ranked higher than others. In the Early stage Technical Enablers, Technical Personnel, Management and Market are ranked far higher than the other six dimensions. Although this trend is generally mirrored in the Growth stage it can be seen an even larger emphasis is put on Management. This is due to Management playing a far more prominent role in the growth stage due to factors such as greater employee numbers.

In order to understand if there is a weighting even within the top dimensions, a second level of analysis, data point two, was carried out. This investigated what percentage of points each dimension was awarded, table two.

Dimensions	Early Stage %	Growth Stage %
Standards & Regulation	1.5	0.7
Technical Enablers	14.1	13
Technical Personnel	17.8	14.2
Management	14.3	24.5
Market	20	17.9
Competition	7	3.2
Business Model	8	9
Monetization	9.8	12
Financial Enablers	5	2.9
Knowledge Creation	2.5	2.6

Table 2. Showing the percentage of votes each dimension received int eh Early and Growth Stages.

Again, in order to visualize the data the figures have been put into a graphical format, figure five.

Early Stage Growth Stage

ISSN 2076-9202

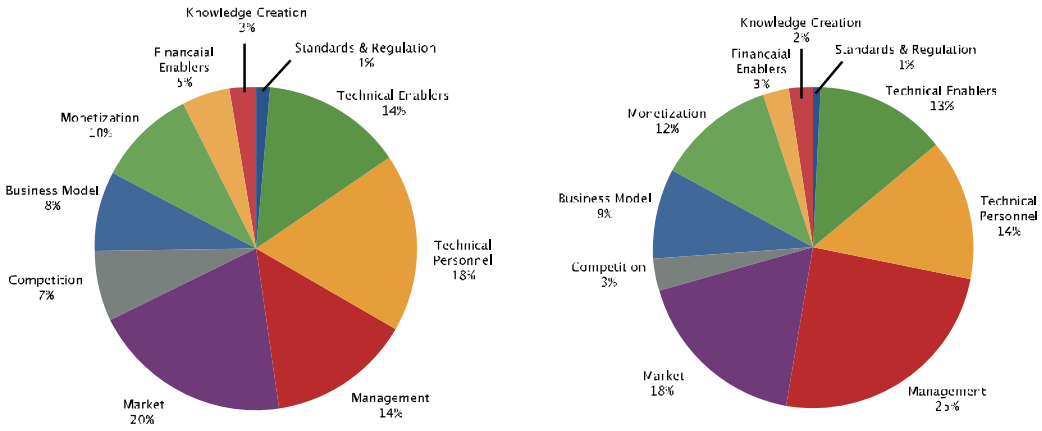


Figure 5. Showing the percentage of the votes each dimension received.

From the analysis of data point two it can be seen that Market and Technical personnel are the two highest ranked with an average of 20% and 18% of the points for the Early Stage and Management and Technical Enablers in third and fourth with 14%. This however is not mirrored for the Growth Stage where Management receives 25%, Market is in second place with 18% and Technical personnel in third with 14%. This shows that the Market and Team (consisting of Management and Technical Personnel) are the key factors.

The market has to be large and growing (well past $1Bn) in order to give the company enough room to pivot and still be able to capture a significant slice of the market. The team are key since they are the constant in the entire innovation process. Other factors can change but the team is generally constant. They must be able to adapt, make a good product great, or pivot from a shrinking to an expanding market. The reason that Technical personnel gains a slight advantage in the Early stage is due to the fact that this stage is generally focused on getting a first product to market. Management gains a larger weighting in the growth stage since at this stage the product has already reached the market and extra factors must be taken into consideration.

Although still ranked highly, with 14% in the Early Stage and 13% in the Growth stage, it is note worthy that Technical Enablers is not consistently ranked in the top two. This is due to a mindset that involves trusting that if the company includes a top tier team, then it will already be in a large, expanding, market and hence will have an improved chance of building a top tier

product.

A further notable point is the fact that Business Model and Monetization, only reach 8% and 10% in the Early Stage and 10% and 13% in the Growth stage respectively. Again, interviewees stated if an investment is made in an excellent team in a large and expanding market the true business model can be altered quickly and efficiently at a later date. In addition, the company doesn't have to start monetizing straight away in order to get market traction. This is particularly prevalent in web-based companies.

The remaining dimensions: Standards & Regulation; Knowledge Creation; Financial Enablers and Competition all consistently scored poorly. Although these aspects, with the exception of knowledge creation, were generally stated as being to a certain extent important the other dimensions have far more of an impact on a company than these.

In order to further examine why dimensions such as Application and Market, Technical Personnel and Management were ranked so highly the interviewees were asked to provide a short explanation as to why they voted their top three so highly. A selection of these descriptions is provided below.

Application & Market

- "Doesn't matter unless it is something the world cares about". CEO of leading cleantech company
- "Market has to be huge". CEO of product tracking company.
- "Need to have this to prove business". Partner at leading Venture Capital Firm.
- "Needs to be massive so the company has room to pivot". Partner at leading Venture Capital Firm.

Technical Personnel

- "People are the bottleneck. You need the right people to make the required innovative tech". CEO of leading Early Stage web development company.
- "People are greatest indicator of success". CEO of leading growth stage mobile

payments company.

- "…are critical to evolving product". CEO of leading product tracking company.
- "Competitors can't copy the team". CEO of leading web development company.
- "The right team can build anything". CEO of leading online payments network.

Management

- "At point of growth you need management to keep company focused". CEO of mobile payments company.
- "Especially in growth where organization skills are required". CEO of leading product tracking company.
- "Highly vested, unlikely to change in near future". Partner in leading Venture Capital firm.
- "Great management can make an average product work". Partner in leading Venture Capital firm.
- "Smart team can change all other factors if needs be" Partner at leading Venture Capital firm.

Failure

In order to compare and contrast, interviewees were asked about the factors that contribute to an unsuccessful company. Like the analysis of data point one, interviewees were asked to rank the dimensions. The results can be seen in table three, this time in reference to which dimensions had the biggest impact on failure.

Dimensions	Early Stage %	Growth Stage %

Standards & Regulation	0.7	0.4
Technical Enablers	4.7	7.4
Technical Personnel	7	5.2
Management	8	8
Market	7	6
Competition	3.4	4.6
Business Model	4.7	5.2
Monetization	4.7	4.4
Financial Enablers	4	3.2
Knowledge Creation	0.4	0.4

Table 3. Showing the rankings of the dimensions in relation to the impact they have on unsuccessful companies. The higher the number the larger the impact.

In order to visualise the data, it was incorporated into a graphical format, figure 6.

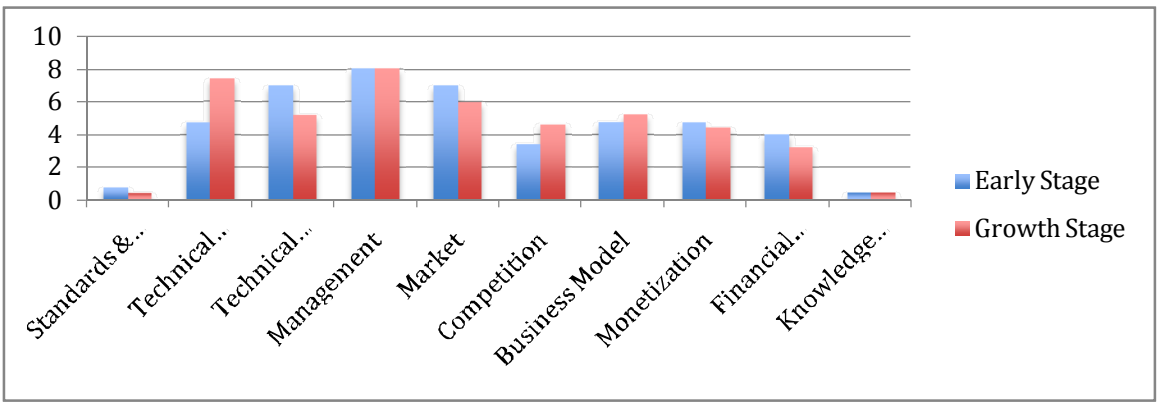


Figure 6. Graph showing the importance of each dimension in relation to ranking the impact they have on unsuccessful companies

As can be seen from figure six and table three the data mirrors the findings from the rankings for successful companies. One exception that can be seen is that Technical Enablers had a higher impact on failure in growth companies. This shows that if the company truly hasn't built a top tier product by the time they approach the growth stage there is a serious issue.

The fact that the other dimensions, Technical Personnel, Management and Application and Market,

mirror the successful influences so closely emphasizes the importance of these areas.

However, one more level of data can be viewed, detailing how the points were allocated to unsuccessful companies, table four.

Dimensions	Early Stage %	Growth Stage %
Standards & Regulation	1.6	0.8
Technical Enablers	13.5	22
Technical Personnel	17	14.3
Management	11.4	22
Market	14.8	14.3
Competition	10.5	7.2
Business Model	12.8	9.2
Monetization	8.8	3.2
Financial Enablers	7	6.3
Knowledge Creation	2.6	0.6

Table 4. Showing the rankings of each dimension in relation to the impact they have on unsuccessful companies.

These data points were transferred to a graphical format to allow visualisation, figure seven.

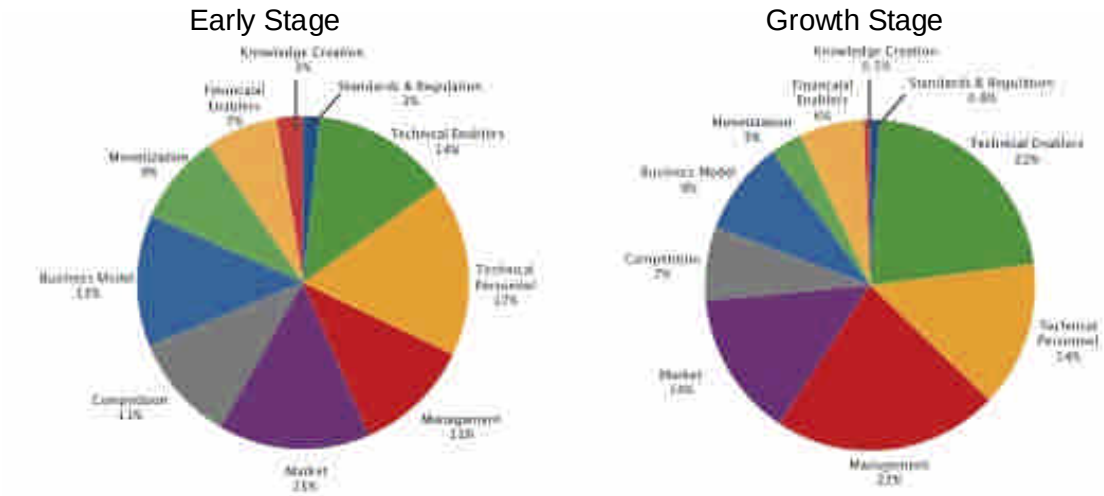


Figure 7. Showing the point allocation to dimensions as they influence unsuccessful companies.

This mirrors the analysis of data point two, showing the top three most influential dimensions are Application and Market, Management and Technical Personnel. However, as noted in the

rankings for unsuccessful companies, Technical Enablers play an extremely important role at a growth stage for defining a company's success. This is also shown through the importance of Management at a growth stage over an early stage.

5. Recommendations

High-growth companies, looking to raise private financing, can take learning points from this report in regard to the evaluation process of potential investments.

The focus on the early stage should be Market and Team. This should focus around the size of the Market and whether it is growing. Factors affecting this may include, but not limited to, whether the market is greater than £1Bn, expected growth rate over the next year and Compound Annual Growth Rate for the following four years for the territories the company is targeting. For an Early Stage company Technical Personnel also has to be a major focus. This may include investigating potential employees previous track record with academic qualifications but especially any previous commercial product experience.

For companies in the growth stage, in addition to investigating the Market, Management should be able to break down why they are able to lead the company. This can include relevant academic qualifications but a more prevalent example would be their previous experience in the market. Management should be involved in real-time detailed discussions about the market and external factors of the company's success. However, the detail of these conversations are reliant on the investors understanding of the market..

Secondary levels of focus are the Business Model, Monetization and Competition elements. These need to be investigated in more depth for a company in a growth stage since they should be becoming finalized at this point. For Business Model, a simple Powerpoint presentation may suffice for an overall picture of the management's thoughts. This medium is recommended over a written document since it is the instrument of choice in Silicon Valley for distributing investment opportunities, and for good reason. It enables the presentation 'deck' to be made or altered quickly, the information can be absorbed rapidly and it can be easily passed around multiple parties who have shown an interest in investing. Of course further due diligence for the Business Model and Monetization dimensions can be requested through

ISSN 2076-9202

spread sheets if required. As with all dimensions, Monetization should be taken on a case by case basis. It can be noted that simply because a company hasn't started monetizing its user base does not mean it will not be a successful company, especially in the web sector. A strong user base provides a platform for product feedback. Competition elements can be discussed within the business model deck to cover pricing options, product placement, potential growth and even acquisition.

Due to the extent of the investment community in Silicon Valley Financial Enablers (other investors) can often play an important role in investment decisions since it shows a certain confidence in a company if a top tier investor is also investing. These investors can provide vital introductions and open multiple doors to speed the growth of a company. However, due to the smaller scale of the investment community in the UK this factor holds less weight.

Factors such as Knowledge Creation and Standards & Regulation are not directly required for the decision making process on investment and should not be required to be asked. If suitable levels of questioning are covered in the other dimensions it enables these bottom two dimensions to become insignificant.

Reflections

Throughout the research undertaken in this report it was clear that when the top dimensions had been identified, which they have, the next stage would be to research the most prevalent actions to maximize the opportunity of commercial success. Although recommendations have been given on certain actions that could be taken, a full research paper should be carried out to investigate the questions and answers during successful investments.

One method of doing such an investigation would be to follow a similar methodology to this paper. This would include interviewing top tier private investors such as Venture Capitalists and Angel Investors, along with management from companies that have successfully passed through private funding rounds. Investors may be interviewed about the direct actions that create top tier Management, Technical Personnel and Market opportunities.

Appendix A

ISSN 2076-9202

Private Funds

- Redpoint Ventures
- Lightspeed Venture Partners
- XG Ventures
- Union Square Ventures
- August Capital
- Draper Fisher Jurveston
- Reed Elsevier
- Mayfield Fund

Growth Stage companies

- Yotta Mark
- Heroku
- Tesla Motors
- Boku
- Unity
- Le High Technology
- Xobni
- Airbnb
- Vayologic
- Cutting Edge

Early Stage Companies

- Rethink DB
- Heyzap
- Scoopler
- Vid.ly
- Jam Legend
- Uservoice
- Kontagent
- Mooral

ISSN 2076-9202

- Locarna
- Webgreek

References

Abernathy, W.J & Utterback, J.M (1978) *Patterns of innovation in Industry.* Technology Review, Vol. 80, No. 7, pp. 40-47

Auerswald, P.E & Branscomb, L.M (2003) *Valleys of Death and Darwinian Seas: Financing the Invention to Innovation Transition in the United States.* Journal of Technology Transfer, 28, 227-239.

British Venture Capital Association. BVCA Private Equity and Venture Capital Report on Investment Activity 2009

Gill, J & Johnson, P, 1997 Research Methods for Managers, Sage Publications

Gompers, P.A. & Lerner, J. (1999) *The Venture Capital Cycle'*.The MIT Press

Gompers, P.A & Lerner, J (2001) *The Money Invention – How Venture Capital Creates New Wealth*. Harvard Business School Press. Boston

Meyer, P.S, Yung, J.W & Ausubel, J.H (1999) *Technology Forecasting and social change.*

Murphy, L.M & Edwards P.L (2003) *Bridging the Valley of Death: Transitioning from Public to Private Sector Financing*. National Renewable Energy Laboratory NREL/MP-720-34036

National Venture Capital Association (NVCA). http://www.nvca.org/index.php?option=com_content&view=article&id=251:vc-investments-q4-2009-moneytree&catid=131&Itemid=520

Phaal, R., O'Sullivan, E., Farrukh, C. and Probert, D. (2009), *Developing a framework for mapping industrial emergence*, accepted for Portland International Center for Management of Engineering and Technology Conference (PICMET), Portland, 29 July - 1 August.

Robson, C.,2002, Real World Research, second edition, Blackwell Publishing

Saunders, M., Lewis, P. and Thornhill, A. 2007. Research methods for business students. 4th ed. London: Prentice Hall.

Suarez, F.F (2003) *Battles for technological dominance: an integrative framework.* Research Policy, 33, 271-286.

Utterback, J.M (1994) *Mastering the Dynamics of Innovation: how companies can seize opportunities in the face of technological change*.

Acknowledgements

I wish to thank the Institute for Manufacturing at Cambridge University, especially Dr Eoin O'Sullivan and Dr Timothy Minshall for their support and guidance throughout this project. Particular thanks must also go to the Royal Academy of Engineering, without their belief in the research topic and financial backing the project would never have been possible. I would also like to take a moment to thank all the interviewees, although too many to name individually, who took the time to talk with me about their experiences.

IFM

The Institute for Manufacturing (IfM) is the public face of the Department of Engineering's Manufacturing and Management Division. The IfM takes a distinctive, cross-disciplinary approach, bringing together expertise in management, technology and policy to address the full spectrum of industrial issues. The IfM's activities take place within an unusual structure that integrates research and education with practical application in industry, via a university-owned company, IfM Education and Consultancy Services Ltd.

IfM research is undertaken in close collaboration with companies, ensuring its relevance to industrial needs and the rapid dissemination of new ideas and approaches. It aims to develop practical solutions to current industrial issues and covers all areas from understanding markets and technologies, through product and process design to operations, distribution and related services.

Royal Academy of Engineering

As Britain's national academy for engineering, it brings together the country's most eminent engineers from all disciplines to promote excellence in the science, art and practice of engineering. The Academy's

strategic priorities are to enhance the UK's engineering capabilities; to celebrate excellence and inspire the next generation; and to lead debate by guiding informed thinking and influencing public policy.

About the Author

Andrew McCalister was born and raised in Glasgow, Scotland. He initially studied Engineering at the University of Glasgow where, in his final year, he invented an anti-bomb device that has an international patent pending. Due to the novelty of the technology he won the Biggart Baillie National Innovation award and Shell Live Wire Grand Idea.

Following his undergraduate Degree Mr McCalister obtained an EPSRC scholarship to read for a Masters in Engineering and Management at the Universtiy of Cambridge. Graduating with Distinction, he carried out projects in a vast array of industries during his tenure including Chemical Detection, Heavy Machinery, Pharmaceuticals, Defence and Finance.

ISSN 2076-9202

Branding and Market Practices of Small Entrepreneurs of India

First author ; Dr. RAJ KUMAR GAUTAM

Dr. RAJ KUMAR GAUTAM is Assistant Professor in (Management) with Punjabi University Regional Center for IT And Management, Mohali, Punjab, India. He is teaching to students of MBA in the area of marketing and international marketing. He has produced number of papers in the national journals.

Office Address :

Punjabi University Regional Center for IT & Management
PhaseVII, Mohali, Punjab
India.
Telephone : 91-172-5094196
Mobile : 91-9888605310
e-mail : raj5310@gmail.com

Residence Address :

H.No : 5310-B, Sector : 38 (West)
Chandigarh.
Pincode – 160014
Telephone- 91-172-2625121.

Second author ; Dr. RAGHBIR SINGH

Dr. *RAGHBIR SINGH* is Professor in the department of Commerce and Business Management, Guru Nanak Dev University, Amritsar. He has vast teaching and research experience. He has guided number of P.hds and have more than 60 research papers published both in National and International Journals.

Office Address :

Department of Commerce and Management,
Guru Nanak Dev University, Amritsar, Punjab
India.
Telephone : 91-183- 2258802 to 2258809 Extn 3181
Mobile : 91-9872217111
e-mail : raghbirsingh@mail.com

Residence Address :

H.No : A- 8, Guru Nanak Dev University Campus

ISSN 2076-9202

Amritsar, Punjab, India
Telephone- 91-183- 2258872

Abstract

The aim of the paper is to study the branding and marketing practices of *the Small-Scale Industry in the leading industrial state of Punjab. India. The entrepreneur's perception relating to various issues of branding and marketing have been highlighted in this paper. Total 173 units manufacturing textiles, bicycle and bicycle parts, food products and beverages and leather and leather products have been surveyed. A number of statements indicating the branding and marketing issues have been developed and the respondents were asked to rank these in order of preference. The weighted rankings have been calculated for ranking the various objectives in order of importance by assigning the weights, 4, 3, 2 and 1 to ranks 1, 2, 3 and 4 respectively.*

The major finding reveals that small manufacturers are not using branding for their products and have limited approach towards marketing.

Key Words: Branding, marketing issues, leather and leather products, small manufacturers

Introduction

Marketing is a dynamic process and it plays a significant role in the success of a business. It is the process of finding customer needs and serving those needs immediately with profit. The present modern marketing concept concentrates on the various needs, desires and wants of the consumers and plans to satisfy them right from production stage to after sales services. The purpose of marketing is to create a competitive advantage. Effective strategy moves are grounded in valid and insightful

monitoring of the current competitive position coupled with evidence that reveals the skills and resources affording the most leverage on future cost differentiation advantages (Day and Wensley, 1988). The sensitive issues of marketing such as setting of market objectives, collecting marketing information system, proper market segmentation strategies are extremely important in the domestic and international markets. (Kaplan and Norton, 1993) observed that different market strategies and competitive conditions are required for balanced growth.

Marketers needs to focus on brand building efforts which help the organization to deliver the promises to customer through all company departments, intermediaries and suppliers (Ghodeswar, 2008). Core value is vital for continuity, consistency and credibility as the brand awareness, knowledge and interest for branded product among Indian buyers is increasing. So, Indian companies should emphasize on strong brand building, maintaining brand and making necessary changes in their brands according to market demands (Urde, 2003).

Hence, due to increased competition there is need to opt for appropriate strategies especially by the small manufacturers in the area of marketing for the success of their organizations. The small industry no longer can seek protection from the government as at present very few items are reserved exclusive production for the SSI in manufacturing area, namely, food and allied industries, wood and wood products, paper products, plastic products, injection moulding and thermo plastic products, organic chemicals drugs and drug intermediaries, other chemicals and chemical products, glass and ceramics, mechanical engineering excluding transport equipments, electrical machines etc. The reserved items in 1990s were 836 (Development Commissioner, MSME, 2010). Hence, the SSI is directly or indirectly facing competition from medium, large and multinational companies.

ISSN 2076-9202

Objectives of the Study

The specific objectives of the study are:

- To ascertain the marketing objectives and types of markets being covered by the selected small sector units manufacturing textiles, bicycle and bicycle parts, food products and beverages and leather and leather products.
- To know the basis of market segmentation and market information system being used by these units.
- To identify the reasons for branding and non branding of products.
- To know the purpose of packaging of products.

Research Methodology

For the purpose of present study, selected SSI units manufacturing textiles, bicycle and bicycle parts, leather and leather products, and food products and beverages in the state of Punjab have been considered. The planned sample of 200 units comprised 50 small-scale units each selected from manufacturing areas such as textiles, leather and leather products, bicycle and bicycle parts, and food products and beverages. However, as the information provided by the respondent entrepreneurs of 27 units was not complete, therefore, they were excluded from the final analysis. Thus, the final sample comprised of 173 SSI units of Punjab. The study is based on primary data which has been collected by a structured, non-disguised and pre-tested questionnaire. The analysis has been done on the basis of three variables, viz. Industry, Age of the units and Turnover of the units. Industry-wise analysis has been done on the basis of four industries, viz. textiles (TX), bicycle and bicycle parts (BBP), food products and beverages (FPB), and leather and leather products (LLP), and food products and

ISSN 2076-9202

beverages (FPB). On the basis of age, units have been categorized into three age-groups, viz. A1 (up to 10 years), A2 (10 to 20 years), and A3 (above 20 years). Turnover-wise units have been classified into three categories, that is T1 (up to Rs. 2 crore), T2 (Rs.2 to 4 crore) and T3 (above Rs. 4 crore).

Discussion and Analysis

The sample comprising 173 units includes 43 textiles units, 46 bicycle and bicycle parts units, 43 food products and beverages units, and 41 leather and leather products units. It has been observed that 82 units fall into age group A2, 54 units belong to A1 and 37 units relate to age group of A3. It has also been seen that 66 units relate to turnover-group T1 followed by group T3 (65) and T2 (42).

A number of statements indicating the research objectives on SSIs have been developed and the respondents of surveyed units were asked to rank these in order of preference. The weighted rankings have been calculated for ranking the various objectives in order of importance by assigning the weights, 4, 3, 2 and 1 to ranks 1, 2, 3 and 4 respectively. The responses on the basis of weighted rankings have been shown in Tables 1, 2 and 3.

Table 1

Marketing Objectives (Industry-wise Analysis)

(Weighted Ranking)

Objectives	**TX**	**BBP**	**FPB**	**LLP**	**Total**
(a) Profit maximization	83	66	109	117	375
(b) Customer satisfaction	140	123	115	114	492
(c) To provide better	133	134	118	104	489

products to the market					
(d) To increase the market share	65	133	77	74	349
(e) Any other (product leader)	4	5	8	8	25
N =	43	46	43	41	173

The above Table shows that most of the respondents ranked 'customer satisfaction' (weighted ranking 492), followed by 'to provide better products to the market' (weighted ranking 489), 'profit maximization' (weighted ranking 375) and 'to increase the market share' (weighted ranking 349) as the most important marketing objectives.

Industry-wise analysis shows that the marketing objectives, viz. 'customer satisfaction' and 'to provide better products in the market' (weighted ranking being higher) are quite important among most of the respondents relating to textiles, and bicycle and bicycle parts. However, relatively more respondents belonging to leather and leather products, and food products and beverages considered 'profit maximization' (weighted ranking 117, 109 respectively) as the important objective as compared to the respondents belonging to other surveyed industries. Similarly, the respondents relating to bicycle and bicycle parts industry also considered 'to increase the market share' as the important marketing objective.

The findings with regard to marketing objectives reveal that 'customer satisfaction' and 'to provide better products to the market' are the main marketing objectives of the units manufacturing textiles whereas 'profit maximization' have been ranked as the major objectives by the units relating to leather and leather products. The findings further reveal that none of the unit from all industries laid

emphasis on product leadership as the main marketing objective.

Table 2 shows the responses with respect to marketing objectives given by respondents belonging to different age groups.

Table 2

Marketing Objectives (Age-wise Analysis)

(Weighted Ranking)

Objectives	**A1**	**A2**	**A3**	**Total**
(a) Profit maximization	114	182	79	375
(b) Customer satisfaction	147	241	104	492
(c) To provide better products to the market	159	217	113	489
(d) To increase the market share	110	167	72	349
(e) Any other (product leader)	9	16	0	25
N =	54	82	37	173

The Table depicts that respondents relating to age group A2 have considered 'customer satisfaction', 'to provide better products to the market', 'profit maximization' and 'to increase market share', (weighted ranking being higher) in that order as the most important marketing objectives as compared to respondents belonging to other age-groups. Comparatively, more respondents relating to age group A3 have not given much importance to the above mentioned marketing objectives (weighted ranking being lowest).

The foregoing analysis reveals that units relating to age groups A2 are more considerate about setting the market objectives over rest of the age groups.

The analysis for marketing objectives has also been done across turnover categories and the information is presented in Table 3.

Table 3

Marketing Objectives (Turnover-wise Analysis)

(Weighted Ranking)

Objectives	**T1**	**T2**	**T3**	**Total**
(a) Profit maximization	148	90	137	375
(b) Customer satisfaction	181	119	192	492
(c) To provide better products to the market	186	114	189	489
(d) To increase the market share	125	95	129	349
(e) Any other (product leader)	12	5	8	25
N =	66	42	65	173

Turnover-wise analysis reveals that 'customer satisfaction', 'to provide better products to the market', 'profit maximization' and 'to increase market share' are the most important objectives among majority of the respondents belonging to turnover groups T3, and T1 (weighted ranking being more than T2). Relatively, more respondents relating to turnover group T1 considered other objective like 'product leader' (weighted ranking 12) important as compared to the respondents relating to turnover groups T2 and T3.

The findings of the study reveals that units belonging to turnover group T3 shown more concern for setting the marketing objectives in comparison to turnover groups T1 and T2.

Type of Markets

The industries studied under the study, were enquired about the marketing of

products in domestic as well as international markets. The domestic market includes government institutions, private organizations, individuals, whereas international market means the export of products to USA, Europe, Australia, Africa, Asia, and North America, etc. The entrepreneurs of the surveyed units were asked to name the markets they are catering to. Industry-wise, age-wise and turnover-wise responses of the units are shown in Tables 4, 5 and 6 respectively.

Table 4

Type of Markets- Domestic and International (Industry-wise Analysis)

Markets	**TX**	**BBP**	**FPB**	**LLP**	**Total**
Domestic	7	0	9	0	16
(a) Govt. institutions	(16.3)	(0)	(20.9)	(0)	(9.2)
(b) Private organizations	43	46	43	41	173
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
(c) Individuals	18	11	18	9	56
	(41.9)	(23.9)	(41.9)	(22.0)	(32.4)
(d)) Any other (PSUs)	0	0	4	0	4
	(0)	(0)	(9.3)	(0)	(2.3)
International Market	7	0	3	14	24
(a) USA	(16.3)	(0)	(7.0)	(34.1)	(13.9)
(b) Europe	10	1	7	13	31
	(23.3)	(2.2)	(16.3)	(31.7)	(17.9)
(c) Australia	2	1	2	2	7
	(4.7)	(2.2)	(4.7)	(4.9)	(4.0)
(d) Africa	10	15	15	8	48
	(23.3)	(32.6)	(34.9)	(19.5)	(27.7)
(e) Asia	14	18	16	21	69
	(32.6)	(39.1)	(37.2)	(51.2)	(39.9)
(f) North America	2	7	7	4	20
	(4.7)	(15.2)	(16.3)	(9.8)	(11.6)
N =	43	46	43	41	173

ISSN 2076-9202

It has been observed that in case of domestic market, all the surveyed units sell their products to private organizations. A noticeable number of units (32.4%) also sell their products to individuals.

Industry-wise analysis reveals that 100 per cent respondents relating to different industries are selling their products to private organizations. It has also been observed that 41.9 per cent respondents each belonging to textiles, and food products and beverages, 23.9 per cent respondents from bicycle and bicycle parts, and 22 per cent respondents from leather and leather products sell their products to individuals. Only 9 respondents (20.9%) from food products and beverages, and 7 respondents (16.3%) of textiles are supplying their products to 'government institutions'.

In case of international markets, it has been found that 39.9 per cent respondents export their products to Asian markets followed by Africa (27.7%) and Europe (17.9%). Industry-wise analysis shows that the main export markets for the respondents relating to leather and leather products are Asia (51.2%), USA (34.1%) and Europe (31.7%). However, relatively more number of units belonging to food products and beverages are exporting to Africa (34.9%). Similarly, respondents from bicycle and bicycle parts are covering mostly markets of Asia (39.1%), and Africa (32.6%). The units relating to textiles are exporting to Asia (32.6%), Africa and Europe (23.3% each).

It has been found that only 20.9 per cent units from food products and beverages, and 16.3 per cent units of textiles are supplying their products to government institutions. Majority of the units are exporting their products to Asian markets followed by African and European markets. It has also been observed that none of units manufacturing bicycle and bicycle parts is exporting to USA market.

The information relating to types of markets being covered by

different age groups is presented in Table 5.

Table 5

Type of Markets - Domestic and International (Age-wise Analysis)

Markets	**A1**	**A2**	**A3**	**Total**
Domestic	2	9	5	16
(a) Govt institutions	(3.7)	(11.0)	(13.5)	(9.2)
(b) Private organizations	54	82	37	173
	(100)	(100)	(100)	(100)
(c) Individuals	18	20	18	56
	(33.3)	(24.4)	(48.6)	(32.4)
(d)) Any other (PSUs)	1	3	0	4
	(1.9)	(3.7)	(0)	(2.3)
International Market	5	13	6	24
(a) USA	(9.3)	(15.9)	(16.2)	(13.9)
(b) Europe	8	19	4	31
	(14.8)	(23.2)	(10.8)	(17.9)
(c) Australia	2	4	1	7
	(3.7)	(4.9)	(2.7)	(4.0)
(d)Africa	13	19	16	48
	(24.1)	(23.2)	(43.2)	(27.7)
(e) Asia	14	36	19	69
	(25.9)	(43.9)	(51.4)	(39.9)
(f) North America	4	9	7	20
	(7.4)	(11.0)	(18.9)	(11.6)
N =	54	82	37	173

The table reveals that all the respondents in different age groups are selling their products to ‘private organizations’. In the age groups A3 (48.6%), A1 (33.3%) and A2 (24.4%) respondents are catering to ‘individuals’ also. However, relatively higher proportion of units belonging to A3 age group are exporting to Asia (51.4), and

Africa (43.2%), whereas respondents from category A2 are exporting to Asia (43.9%), Africa and Europe (23.2% each). The respondents belonging to age group A1 have been exporting to Asia (25.9%), and Africa (24.1%).

An analysis of respondents from different turnover groups is presented in Table 6.

Table 6

Type of Markets - Domestic and International (Turnover-wise Analysis)

Markets	**T1**	**T2**	**T3**	**Total**
Domestic	5	4	7	16
(a) Govt. institutions	(7.6)	(9.5)	(10.8)	(9.2)
(b) Private organizations	66	42	65	173
	(100)	(100)	(100)	(100)
(c) Individuals	19	10	27	56
	(28.8)	(23.8)	(41.5)	(32.4)
(d) Any other (PSUs)	1	1	2	4
	(1.5)	(2.4)	(3.1)	(2.3)
International Market	7	5	12	24
(a) USA	(10.6)	(11.9)	(18.5)	(13.9)
(b) Europe	8	9	14	31
	(12.1)	(21.4)	(21.5)	(17.9)
(c) Australia	1	2	4	7
	(1.5)	(4.8)	(6.2)	(4.0)
(d)Africa	13	12	23	48
	(19.7)	(28.6)	(35.4)	(27.7)
(e) Asia	18	18	33	69
	(27.3)	(42.9)	(50.8)	(39.9)
(f) North America	6	3	11	20
	(9.1)	(7.1)	(16.9)	(11.6)
N =	66	42	65	173

The above table shows that all the respondents are catering to private organizations irrespective of their turnover. However, 41.5 per cent units from turnover group T3, 28.8 per cent of T1 and 23.8 per cent of T2 are also supplying their products to individuals. The table further reveals that Asia and Africa are the main export markets for most of the respondents belonging to different turnover groups.

Periodicity of Market Information

The respondents of the surveyed units were further asked to give the periodicity for obtaining the market information. The industry-wise, age-wise, and turnover-wise information has been presented in Tables 7, 8 and 9 respectively.

Table 7

Periodicity of Marketing Information (Industry-wise Analysis)

Periodicity	**TX**	**BBP**	**FPB**	**LLP**	**Total**
(a) Yearly	0 (0)	0 (0)	4 (9.3)	0 (0)	4 (2.3)
(b) Half- yearly	0 (0)	1 (2.2)	4 (9.3)	1 (2.4)	6 (3.5)
(c) Quarterly	20 (46.5)	20 (46.5)	22 (51.2)	18 (43.9)	70 (40.5)
(ii) Regularly (day to day basis)	0 (0)	1 (2.2)	1 (2.3)	3 (7.3)	5 (2.9)
(iii) As per requirements	27 (62.8)	43 (93.5)	28 (65.1)	33 (80.5)	131 (75.7)
N =	43	46	43	41	173

It can be observed from Table 7 that most of the respondents (75.7%) obtain market information 'as per requirements', whereas a noticeable number of respondents (40.5%) collect market information on 'quarterly' basis too. Industry-wise analysis reveals that highest proportion of respondents belonging to bicycle and bicycle parts (93.5%) followed by leather and leather products (80.5%), food products and beverages (65.1%) and textiles (62.8%) collect market information as and when the need arises.

It has been observed that most of the units belonging to different industries collect market information 'as and when required' by them, whereas a noticeable number of units also collect market information on a quarterly basis too. It has also been noticed that very low percentage of units are collecting market information on the regular basis.

Age groups-wise responses regarding the periodicity of the market information are shown in Table 8.

Table 8

Periodicity of Market Information (Age-wise Analysis)

Periodicity	**A1**	**A2**	**A3**	**Total**
(a) Yearly	2 (3.7)	1 (1.2)	1 (2.7)	4 (2.3)
(b) Half- yearly	1 (1.9)	4 (4.9)	1 (2.7)	6 (3.5)
(c) Quarterly	21 (38.9)	32 (39.0)	17 (45.9)	70 (40.5)
(ii) Regularly (day to day basis)	1 (1.9)	3 (3.7)	1 (2.7)	5 (2.9)
(iii) As per requirements	40 (74.1)	62 (75.6)	29 (78.4)	131 (75.7)

N =	54	82	37	173

The Table reveals that majority of the respondents from all age groups collect information as per requirements. Generally the respondents belonging to age groups A3 (45.9%), A2 (39%) and A1 (38.9%) also collect information on 'quarterly' basis during the year.

Table 9 shows the turnover group-wise periodicity for collection of market information by the respondents.

Table 9

Periodicity of Market Information (Turnover-wise Analysis)

Periodicity	**T1**	**T2**	**T3**	**Total**
(a) Yearly	2 (3.0)	1 (2.4)	1 (1.5)	4 (2.3)
(b) Half- yearly	1 (1.5)	2 (4.8)	3 (4.6)	6 (3.5)
(c) Quarterly	20 (30.3)	14 (33.3)	36 (55.4)	70 (40.5)
(ii) Regularly (day to day basis)	2 (3.0)	1 (2.4)	2 (3.1)	5 (2.9)
(iii) As per requirements	51 (77.3)	33 (78.6)	47 (72.3)	131 (75.7)
N =	66	42	65	173

The table shows that a large majority of the respondents belonging to various turnover categories obtain information as per their requirements. The proportion of respondents collecting market information on 'quarterly' basis is quite higher in category T3 (55.4%) in comparison to categories T2 (33.3%) and T1 (30.3%).

In brief it has been observed that the percentage of units collecting market information on quarterly basis is higher in the case of units falling under higher turnover category T3 than the lower turnover categories T1 and and T2.

Market Segmentation

The respondents of the manufacturing units were asked to indicate the basis of market segmentation used for the market purpose. Tables 10, 11 and 12 present the responses of the respondents in this respect.

Table 10

Bases of Market Segmentation (Industry-wise Analysis)

Bases	**TX**	**BBP**	**FPB**	**LLP**	**Total**
(a) Geographical	27 (62.8)	30 (65.2)	28 (65.1)	21 (51.2)	106 (61.3)
(b) Psychographics	1 (2.3)	2 (4.3)	0 (0)	2 (4.9)	5 (2.9)
(c) Behavioural	16 (37.2)	2 (4.3)	16 (37.2)	9 (22.0)	43 (24.9)
(d) Demographic	7 (16.3)	1 (2.2)	1 (2.3)	3 (7.3)	12 (6.9)
(e) Any other (demand and consumption)	8 (18.6)	23 (50.0)	11 (25.6)	17 (41.5)	59 (34.1)
N =	43	46	43	41	173

Table 10 indicates that 106 respondents (61.3%) out of the total 173 surveyed units divide the market on ‘geographical’ basis. This is followed by ‘demand and consumption’ (34.1%) and ‘behavioural’ (24.9%).

Industry-wise analysis shows that respondents relating to bicycle and bicycle parts (65.2%), food product and beverages (65.1%), textiles (62.8%), and leather and leather products (51.2%) have done market segmentation on 'geographical' basis. 'Behavioural segmentation' is also popular among the respondents belonging to textiles, and food products and beverages as depicted by respective percentage of 37.2 per cent each. However, a noticeable number of respondents relating to bicycle and bicycle parts (50%), followed by leather and leather products (41.5%), food products and beverages (25.6%), and textiles (18.6%) have also been dividing the market on the basis of other reasons such as 'demand and consumption' in the market.

Findings of the study shows that majority of the units have been doing market segmentation on 'geographical' basis. 'Behavioural segmentation' is popular among the units belonging to textiles, and food products and beverages. A noticeable number of units relating to bicycle and bicycle parts and leather and leather products have also been dividing the market on the basis of demand and consumption of the products in the market.

The information on the basis of different age groups regarding market segmentation is presented in Table 11.

Table 11

Bases of Market Segmentation (Age-wise Analysis)

Bases	**A1**	**A2**	**A3**	**Total**
(a) Geographical	33 (61.1)	47 (57.3)	26 (70.3)	106 (61.3)
(b) Psychographics	3 (5.6)	2 (2.4)	0 (0)	5 (2.9)
(c) Behavioural	11 (20.4)	26 (31.7)	6 (16.2)	43 (24.9)

ISSN 2076-9202

(d) Demographic	2 (3.7)	6 (7.3)	4 (10.8)	12 (6.9)
(e) Any other (demand and consumption)	19 (35.2)	26 (31.7)	14 (37.8)	59 (34.1)
N =	54	82	37	173

It is clear from the above table that the respondents in age groups A3 (70.3%), A1 (61.1%) and A2 (57.3%) mentioned 'geographical segmentation' as the preferred basis of market segmentation. However, 37.8 per cent respondents in age group A3, 35.2 per cent in age group A1 and 31.7 per cent in the age group A2 mentioned that they divide the market on the basis of other reasons such as 'demand and consumption' of products.

In nutshell, it has been found that most of the units in different age-groups have been dividing the market on 'geographical' basis. The number of units dividing the market on the basis of demand and consumption of their products is greater in the age group A3 than the groups A1 and A2.

The table 12 shows turnover-wise responses for segmenting the markets.

Table 12

Bases of Market Segmentation (Turnover-wise Analysis)

Bases	**T1**	**T2**	**T3**	**Total**
(a) Geographical	40 (60.6)	24 (57.1)	42 (64.6)	106 (61.3)
(b) Psychographics	4 (6.1)	1 (2.4)	0 (0)	5 (2.9)
(c) Behavioural	14 (21.2)	10 (23.8)	19 (29.2)	43 (24.9)
(d) Demographic	6 (9.1)	0 (0)	6 (9.2)	12 (6.9)

(e) Any other (demand and consumption)	24 (36.4)	17 (40.5)	18 (27.7)	59 (34.1)
N =	66	42	65	173

The turnover-wise responses of the surveyed units in table 5.15 reveal that 64.6 per cent respondents in turnover group T3, 60.6 per cent in turnover group T1 and 57.1 per cent in turnover group T2 are dividing the market on 'geographical basis'. A noticeable number of the respondents in different age groups also divide market on the basis of 'demand and consumption' of products.

The foregoing analysis reveals that most of the units are dividing the market on 'geographical' basis. A good number of units in different turnover-groups also divide market on the basis of demand and consumption of their products.

Branding of Products

The entrepreneurs of the surveyed units were asked to state whether they use any brand name for the products manufactured by them. Industry-wise, age-wise and turnover-wise responses are shown in Tables 13, 14 and 15 respectively.

Table 13

Branding of Products (Industry-wise Analysis)

Use	TX	BBP	FPB	LLP	Total
Branding of products	15 (34.9)	14 (30.4)	17 (39.5)	14 (34.1)	60 (34.7)
Not Branding of products	28 (65.1)	32 (69.6)	26 (60.5)	27 (65.9)	113 (65.3)
N =	43	46	43	41	173

Table 13 reveals that only 60 respondents (34.7%), out of the total respondents

have been using brand name for their products. Industry-wise analysis shows that respondents relating to food products and beverages (39.5%), textiles (34.9%), leather and leather products (34.1%), and bicycle and bicycle parts (30.4%) have been using brand name. However, a large majority of respondent entrepreneurs (65.3%) out of the total 173 surveyed units are not using any brand name for their products. It is also clear from the table that respondents relating to bicycle and bicycle parts (69.6%), leather and leather products (65.9%), textiles (65.1%) and food products and beverages (60.5%) have not been using any brand name for their products.

The findings with regard to branding reveals that low percentage units out of the total respondents have been using brand name for their products.

Table 14 shows age-wise information on branding and not branding of products manufactured by the respondents.

Table 14

Branding of Products (Age-wise Analysis)

Use	**A1**	**A2**	**A3**	**Total**
Branding of products	15 (27.8)	27 (32.9)	18 (48.6)	60 (34.7)
Not Branding of products	39 (72.2)	55 (67.1)	19 (51.4)	113 (65.3)
N =	54	82	37	173

The Table indicates that 48.6 per cent respondents belonging to age group A3, 32.9 per cent respondents relating to age group A2 and 27.8 per cent respondents from age group A1 have been using brand name for their products. Table also indicates that 72.2 per cent units belonging to age group A1, 67.1 per cent units relating to age

group A2, and 51.4 per cent units relating to age group A3 are not using any brand name. It is clear that majority of the units from different age categories have not been using brand name for the products manufactured by them.

Findings of the study revels that more units relating to age group A3 have been using brand name for the products in comparison to units of other age groups.

Turnover group-wise responses for branding and not branding of products are given in Table 15.

Table 15

Branding of Products (Turnover-wise Analysis)

Use	**T1**	**T2**	**T3**	**Total**
Branding of products	17 (25.7)	10 (23.8)	33 (50.7)	60 (34.7)
Not Branding of products	49 (74.3)	32 (76.2)	32 (49.3)	113 (65.3)
N =	66	42	65	173

Turnover-wise analysis reveals that relatively higher number of respondents from category T3 (50.7%) have preferred to use brand name as compared to category T1 (25.7%) and T2 (23.8%). The table further reveals that the respondents of surveyed units belonging to turnover groups T2 (76.2%), T1 (74.3%) and T3 (49.3%) are not using any brand name for their products.

Reasons for Branding the Products

The entrepreneurs of surveyed units using brand name were further asked to state the reasons for doing so. They were asked to rank the important reasons for branding the products manufactured by them. The weighted rankings were calculated

for ranking the various reasons in order of their importance by assigning the weights 4, 3, 2 and 1 to ranks 1, 2, 3 and 4 respectively. Industry-wise, age-wise and turnover-wise weighted ranking is presented in Tables 16, 17 and 18 respectively.

Table 16

Reasons for Branding (Industry-wise Analysis)

(Weighted Ranking)

Reasons	**TX**	**BBP**	**FPB**	**LLP**	**Total**
(a) To build image	32	47	48	35	162
(b) To differentiate from competitor's products	29	40	44	31	144
(c) To ensure repeat purchase	37	40	52	24	153
(d) To increase market share	28	41	35	18	122
(e) To compete in the market	37	21	33	16	107
(f) To charge higher prices	13	9	16	9	47
(g) Any other	0	8	1	2	11
N =	15	14	17	14	60

It can be observed from the above table that most of the units have stated the reasons such as 'to build image' (weighted ranking 162), followed by 'to ensure repeat purchases'(weighted ranking 153) and 'to differentiate from competitors products'(weighted ranking 144) important for branding the products.

Industry-wise analysis in the Table 5.25 reveals that 'to ensure repeat purchase', 'to build image' and 'to differentiate from competitor's products'(weighted ranking 52, 48 and 44 respectively in that order) are considered important reasons for using brand name by most of the respondents relating to food products and beverages,

followed by the units from bicycle and bicycle parts industry. Relatively, higher number of respondents belonging to textile industry considered 'to compete in the market' as the important reason for branding the products as compared to respondents relating to other industries.

It has been observed that most of the units use brand name in order 'to build image' and 'to ensure repeat purchase'. However, the units belonging to food products and beverages, do branding of their products mainly with a view 'to ensure repeat purchase' and this reason attains greater significance in such units as compared to other units.

An analysis of respondents from different age groups is presented in Table 17.

Table 17

Reasons for Branding (Age-wise Analysis)

(Weighted Ranking)

Reasons	**A1**	**A2**	**A3**	**Total**
(a) To build image	51	65	46	162
(b) To differentiate from competitor's products	40	65	39	144
(c) To ensure repeat purchase	42	67	44	153
(d) To increase market share	20	54	48	122
(e) To compete in the market	40	38	29	107
(f) To charge higher prices	14	24	9	47
(g) Any other	0	7	4	11
N=	15	27	18	60

Table 17 explicitly explains that the respondents from age group A2 as compared to respondents belonging to age groups A1 and A3 attribute greater significance to the reasons, such as 'to ensure repeat purchase' (weighted ranking

67) 'to build image', 'to differentiate from competitor's products'(weighted ranking 65 each) and 'to increase market share'(weighted ranking 54) for branding their products. However, the respondents relating to age group A1 also considered 'to compete in the market' (weighted ranking 40) as the important reason for branding their products.

In brief it has been observed that units falling in group A2 have different reasons for branding their products. In such units the branding of products is done with a view 'to increase their market share', 'build image' and 'ensure repeat purchase'. The importance provided to these reasons is greater among such units as compared to those falling under groups A1 and A3

Age groups-wise responses for the reasons of branding the products are shown in Table 18.

Table 18
Reasons for Branding (Turnover-wise Analysis)
(Weighted Ranking)

Reasons	**T1**	**T2**	**T3**	**Total**
(a) To build image	44	29	89	162
(b) To differentiate from competitor's products	48	21	75	144
(c) To ensure repeat purchase	33	39	81	153
(d) To increase market share	25	21	76	122
(e) To compete in the market	29	17	61	107
(f) To charge higher prices	9	12	26	47
(g) Any other	1	5	5	11
N =	17	10	33	60

It is clear from Table 18 that the respondents belonging to turnover group T3 in comparison to respondents from categories T1 and T2 give more importance to the reasons, such as 'to build image', 'to ensure repeat purchase', 'to increase market share', 'to differentiate from competitors products' and 'to compete in the market' (weighted ranking being higher in that order) for branding their products.

It has been observed that units falling under turnover group T3 have provided more importance to these reasons for branding of their products as compared to groups T1 and T2.

Reasons for Not Branding the Products

Further, the respondents not branding their products were asked the reasons for doing so. The weighted rankings were calculated for ranking the various reasons in order of their importance by assigning the weights 4, 3, 2 and 1 to ranks 1, 2, 3 and 4 respectively. Industry-wise, age-wise and turnover-wise information is presented in Tables 19, 20 and 21 respectively.

Table 19

Reasons for not branding the Products (Industry-wise Analysis)

(Weighted Ranking)

Reasons	**TX**	**BBP**	**FPB**	**LLP**	**Total**
(a) Lack of resources	55	63	53	74	245
(b) Lack of proper return	63	58	62	71	254
(c) Uncertain future plans	18	50	29	25	122
(d) Involvement as outsourcing unit	20	53	24	17	114
(e) Costly proposition	55	37	49	59	200
(f) Any other	-	-	-	-	

N =	28	32	26	27	113

The above table reveals that most of surveyed units have stated the reasons such as 'lack of proper return' and 'lack of resources' (weighted ranking 254 and 245 respectively) as the most important for not branding the products.

Industry-wise analysis of the table 19 shows that the respondents relating to leather and leather products considered 'lack of resources' (weighted ranking 74) and 'lack of proper return' (weighted ranking 71) as the significant reasons for not using the brand name. This is followed by units relating to textiles and food products and beverages. However, the respondents belonging to bicycle and bicycle parts believed 'involvement as outsourcing unit' and 'uncertain future plans' (weighted ranking being 53 and 50) as the important reasons for not branding their products. Further, units from textiles and leather and leather products also considered 'costly proposition' (weighted ranking 55) as more important reason for not branding of their products as compared to other surveyed industries.

Findings with regard to non branding of products reveal that units relating to leather and leather products considered 'lack of resources' and lack of proper return' as the main reasons for not branding their products. However, the units from bicycle and bicycle parts have given 'uncertain future plans' and 'involvement as outsourcing unit' as the important reasons for not branding their products.

The responses regarding the reasons for not branding the products given by different age groups are presented in Table 20.

Table 20

Reasons for not branding the Products (Age-wise Analysis)

(Weighted Ranking)

Reasons	**A1**	**A2**	**A3**	**Total**

(a) Lack of resources	77	129	39	245
(b) Lack of proper return	98	116	40	254
(c) Uncertain future plans	48	65	9	122
(d) Involvement as outsourcing unit	40	64	10	114
(e) Costly proposition	69	99	32	200
(f) Any other	-	-	-	
N = 113	39	55	19	113

The table reveals that proportionately higher number of respondents relating to age group A2 as compared to A1 and A3 have given 'lack of resources', 'lack of proper return', 'costly proposition', 'uncertain future plans' and 'involvement as outsourcing unit (weighted ranking being higher) as the important reasons for not branding their products.

Findings of the study revels that units from category A2 have provided more importance to these reasons for non branding of their products as compared to other age- group categories.

Table 21

Reasons for not branding the Products (Turnover-wise Analysis)

(Weighted Ranking)

Reasons	**T1**	**T2**	**T3**	**Total**
(a) Lack of resources	112	72	61	245
(b) Lack of proper return	122	63	69	254
(c) Uncertain future plans	47	55	20	122
(d) Involvement as outsourcing unit	64	29	21	114
(e) Costly proposition	91	51	58	200
(f) Any other	-	-	-	
N = 113	49	32	32	113

Table 21 exhibits that respondents belonging to turnover group T1 in comparison to groups T2 and T3 have given more significance to the reasons, 'lack of proper return', 'lack of resources', 'costly proposition' and 'involvement as outsourcing units' (weighted ranking being higher) for not using the brand name for their products. Whereas the units from category T2 considered the reason 'uncertain future plan' important for not branding their products.

It has also been found that the units from category T2 considered 'uncertain future plan' as important reason for not branding their products

Conclusion

The small industry has to focus more on the product related improvement including product leadership to increase it share in the market. In the present era importance of branding can not be ignored which is lacking in case of small manufacturing units. Branding helps the manufacturers to build image, increases chances of repeat purchases, increases market share and to compete and serve the market successfully. Branding of products would also open the new market opportunities for the small enterprises. The small units need to understand that non branded products are not encouraged in the market as the markets have become highly competitive.

Small entrepreneurs should explore the possibilities to enter the foreign markets such as USA, Australia and European Markets to increase their sales and turnover. For this purpose, they have to obtain market information on regular basis without any delay. The industry needs to understand the importance of quick and accurate market information system to remain in the market. Small manufacturers should also focus on proper market segmentation for their products by way of market

ISSN 2076-9202

research. No organizations can survive or serve the market without understanding the psychology and behaviour of the customers.

It is the time when industry has to generate their own resources as it is no longer can seek the protection from the Governments. The small units have to meet all business standards prevalent in the market.

References

Day, George S.; and Wensley, Robin (1988), "Assessing Advantage: A Framework for Diagnosing Competitive Superiority," *Journal of Marketing*, 52, pp. 1-20.

Development Commissioner, (2010), Ministry of Micro Small and Medium Enterprises, Government of India, New Delhi.

Ghodeswar,M. Bhimao (2008), "Building Brand Identity in Competitive Market: A Conceptual Model" *Journal of Product and Brand Management*, 17(1), pp. 4-12.

Kaplan, Robert ; and Norton, David (1993), " Putting the Balanced Scorecard to Work," Harvard Business Review, Sept-Oct, pp. 134-137.

Urde, Mates (2003), "Core Value Based Corporate Brand Building," *European Journal of Marketing*, 37(7/8), pp.1017-1040.

ISSN 2076-9202

Performance Evaluation of Sectoral Mutual Fund Schemes in India: An Empirical Analysis

K.Tulasi Vigneswara Rao
FPM Participant, Finance and Accounting area,
Indian Institute of Management, Indore, India
e-mail: vignesh.kamaraju@gmail.com

Ankit Sharma (Corresponding Author)
FPM Participant, Finance and Accounting area,
Indian Institute of Management, Indore, India
e-mail: motankit@gmail.com

Abstract

A sectoral mutual fund aims to generate the excess returns focusing on specific themes or industry sectors. This kind of mutual funds come in the high risk and high reward category due to the concentration of their portfolio in a particular sector or industry. In this paper an attempt has been made to measure the performance of different sectoral funds by using both risk adjusted measures and downside measures of total 20 open ended and growth schemes belonging to Banking, FMCG, Power, Pharma and Technology sectors. The risk adjusted measures include Sharpe ratio, Treynor index and Jenson alpha while the down side risk measures include downside probability, information ratio and Sortino ratio. The result of the study indicates that selected FMCG sector funds and banking sector funds outperformed the market index. These sectoral fund schemes also generated higher positive alpha values among all the selected sectoral funds.

Keywords: *Sectoral mutual funds, Performance evaluation, Risk adjusted measures, Downside measure*

ISSN 2076-9202

1 Introduction

Mutual Fund is one of the most preferred investment alternatives for the investors as it offers an opportunity to invest in a diversified, professionally managed portfolio at a relatively low cost. A Mutual Fund is a trust that pools the savings of a number of investors who share a common financial goal. Over the past decade, mutual funds have increasingly become the investor's vehicle of choice for long-term investing. The academic literature paid little attention about the sector funds performance evaluation, as the focus of mutual fund performance evaluation is on more diversified funds excluding the sectoral funds due to their concentration on specific industry or investment theme. The investment attractiveness of sectoral funds changes across the industry and business cycle of economy, as the investment returns from the different industry sector varies according the business cycle. The current net fund flows to Indian mutual fund industry can be given by the following chart.

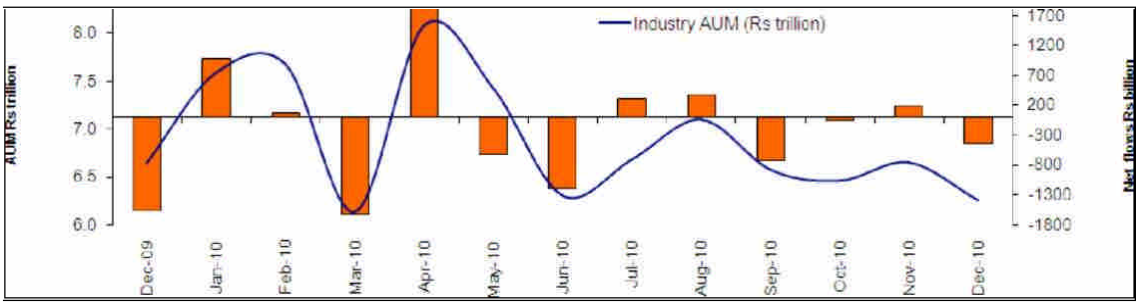


Chart 1 - Mutual fund industry AUM and net fund flows

(Source: AMFI)

Sector mutual funds are those mutual funds that restrict their investments to a particular segment or sector of the economy. Also known as thematic funds, these funds concentrate on one industry such as infrastructure, banking, technology, energy, real estate, power, heath care, FMCG and pharmaceuticals etc. The idea is to allow investors to place bets on specific industries or sectors, which have strong growth potential. Sector funds are actively managed equity funds that are generally diversified within their respective sector of the economy or market, but not

ISSN 2076-9202

well-diversified in the conventional sense because of their narrow industry focus. These funds tend to be more volatile than funds holding a diversified portfolio of securities in many industries. Such concentrated portfolios can produce tremendous gains or losses, depending on whether the chosen sector is in or out of favour. Sectoral mutual funds come in the high risk high reward category and are not suitable for investors having low risk appetite. Generally, mutual fund houses avoid launching sectoral funds as they are seasonal in nature and do well only in cycles. Since these funds focus on just one sector of the economy, they limit diversification and the fund manager's ability to capitalize on other sectors, if the specific sectors aren't doing well. Sector funds have a very narrow investment opportunity set, when compared with the diversified equity funds. The performance of sectoral also linked to the current business cycle of the economy. Given, the high risk and return profile of sectoral mutual funds. It would very interesting to evaluate and know the performance of sectoral mutual fund schemes.

2 Objectives of the study

Indian mutual fund industry is featured by a plethora of mutual fund schemes consisting of varying portfolio mix, investment objectives and expertise of professional fund management. For the small investor, choosing a suitable one is therefore a complex decision. This present study has the objective of finding out the necessary facts regarding performance of selected sectoral mutual fund schemes (growth-oriented and open-ended schemes) which can benefit the investors and fund managers. The specific objectives of the study are:

a) To evaluate the performance of selected sector specific mutual fund schemes by using a comprehensive risk adjusted performance measures.

b) To find out those sectoral mutual fund schemes offering the advantages of

diversification, along with adequate systematic risk compared to market beta risk.

c) To analyze the excess return per unit of risk evidenced by different sectoral mutual fund schemes.

3 Review of literature

The portfolio performance evaluation literature is extensive, but highly controversial. During the past four decades researchers and practitioners across the world have devoted a considerable attention to study the performance of managed portfolios. Some of the widely acknowledged measures employed in evaluating the performance of managed portfolios include the methodologies advocated by Treynor, Sharpe, Jensen, Fama and others. A few research studies that have influenced the preparation of this paper substantially are discussed in this section.

Jack L. Treynor (1965) used 'characteristic line' for relating expected rate of return of a fund to the rate of return of a suitable market average. He coined a fund performance measure taking investment risk into account. Further, to deal with a portfolio, 'portfolio-possibility line' was used to relate expected return to the portfolio owner's risk preference. He has suggested a new predictor of mutual fund performance, one that differs from virtually all those used previously by incorporating the volatility of a fund's return in a simple yet meaningful manner.

The most prominent study by Sharpe, William F. (1966) developed a composite measure of return and risk. He evaluated 34 open-end mutual funds for the period 1944-63. Reward to variability ratio for each scheme was significantly less than DJIA and ranged from 0.43 to 0.78. Expense ratio was inversely related with the fund performance, as correlation coefficient was 0.0505. The results depicted that good performance was associated with low expense ratio and not with the size. Sample schemes showed consistency in risk measure. He also suggested a measure for the

evaluation of portfolio performance. Michael C. Jensen (1967) derived a risk-adjusted measure of portfolio performance (Jensen's alpha) that estimates how much a manager's forecasting ability contributes to fund's returns.

Gupta (1974) evaluated the performance of mutual fund industry for the period 1962-71 using Sharpe, Treynor, and Jensen models. All the funds covered under the study outperformed the market irrespective of the choice of market index. The results indicated that all the three models provided identical results. Return per unit of risk varied with the level of volatility assumed and he concluded that, funds with higher volatility exhibited superior performance.

Sarkar (1991) critically examined mutual fund evaluation methodology and pointed out that Sharpe and Treynor performance measures ranked mutual funds like inspite of their differences in terms of risk. The Sharpe and Treynor index could be used to rank performance of portfolios with different risk levels.

Kale and Uma (1995) conducted a study on the performance of 77 schemes managed by 8 mutual funds. The study revealed that, growth schemes yielded 47 percent CAGR, tax-planning schemes 30 percent CAGR followed by balanced schemes with 28 percent CAGR and income schemes with 18 percent CAGR.

Jayadev (1996) evaluated the performance of two growth oriented mutual funds on the basis of monthly returns compared to benchmark returns over a study period of 21 months. He employed risk-adjusted performance measures suggested by Jensen, Treynor and Sharpe for evaluation. He found that both the funds were poor in earning better returns either adopting market timing strategy or in selecting underpriced securities. Further, the study concluded that the two growth oriented funds have not performed better in terms of total risk and were not offering advantages of diversification and professionalism to the investors.

Khorana and Nelling (1997) analyze the performance of 147 sector funds for the

period 1976-1992. Their results revealed that sector funds perform better than sector indexes but less well than diversified indexes. They exhibit high idiosyncratic and low systematic risk. However, the comparison with equity funds is confusing. If the benchmark is the S&P 500, sector funds underperform equity funds but results change if the benchmark is a sector index. The authors conclude that sector funds perform globally as well as equity funds on a risk-adjusted basis.

Singla and Singh (2000) evaluated performance of 12 growth oriented mutual funds scheme using risk-return relationship models given by Sharpe, Treynor, Jenson and found that the selected funds reported lower average returns than the market return. Kallberg, Liu, and Trzcinka (2000) analyzed mutual funds that invest in real estate investment trusts (REITs), and find that these funds outperform their benchmarks by an average of two percent a year after paying for the fund expenses and transaction costs.

Dellva and al. (2001) study the selectivity and the market timing performance for 35 Fidelity sector funds during the period 1989-1998. They used several benchmark/model/period specifications in order to assess the selectivity and the market-timing performance of sector funds. Whichever the specification, sector funds exhibit positive stock picking and negative market-timing abilities.

Muthappan and Damodharan (2006) evaluated the performance of Indian Mutual Fund schemes in the risk and return framework during the period April 1995 to March 2000 employing Sharpe, Treynor, Jensen, Sharpe differential measure and Fama's components of performance measures. The results indicated that the risk and return of mutual fund schemes were not in conformity with their investment objectives. The sample schemes were found to be inadequately diversified. However, the funds were able to earn higher returns due to selectivity.

Kader and Kuang (2007) examined risk–adjusted performance, selectivity, timing

ability and performance persistence of thirty Hong Kong mutual funds during August 1995 to July 2005. They employed single factor model, three factor models, Jensen's alpha and Treynor index for evaluating weekly returns of the funds as against the benchmark, Hong Kong Hang Seng Index. In addition selectivity and timing ability of fund managers was addressed using Treynor and Mazuy quadratic model. The study evidenced that the funds underperformed relative to the market. Further, the study revealed insignificant selectivity and market timing ability.

Sehgal and Jhanwar (2008) evaluated the performance of 60 growth and growth-income mutual fund schemes in India from January 2000 to December 2004. They examined both the stock selection skills and the timing abilities of the sample fund managers and argued that multi-factor benchmarks provide better selectivity and timing measures compared to one-factor CAPM as they control for style characteristics such as size, value and momentum. The study found that the evidence on selectivity improved marginally when higher frequency data such as daily returns were used instead of monthly returns.

Despite the obvious importance of sector specific mutual funds, there is little evidence on the performance of sector fund managers or sector fund investors in the academic finance literature. Especially in Indian context, there are few or no research studies which evaluated the performance of sectoral funds. From the above review of literature, it was observed that considerable focus has been given on the performance evaluation of various mutual fund schemes but not on sectoral funds. However, the present researcher could identify the research gap and differences some extent to earlier studies and concentrates on the performance evaluation of sectoral mutual funds by measuring (a) Risk adjusted performance (b) Downside and relative adjusted performance.

ISSN 2076-9202

4 Data and Methodology

In this study, dataset includes weekly NAVs of select sectoral funds (growth oriented) as exhibited in Table-1 and the benchmark index, S&P CNX 500 over the period from March 2010 to February 2011. The S&P CNX 500 is India's first broad based benchmark of the Indian capital market representing 95.11% of total market capitalization and about 94.84% of the total turnover on the NSE as on March 31, 2010. For this study, S&P CNX 500 have been used as market proxy.

The data for the funds was taken from the web site of Association of Mutual Funds of India. Further, National Stock Exchange Website is used for obtaining information about the benchmark index. The bank rate of RBI has been used as a surrogate for risk free rate of return. Any missing values for the NAV of the sample schemes and for the index have been excluded to equalize the financial time series data. These values formed the basis for the study to examine the risk-adjusted performance of the sample funds. The weekly returns were calculated for the sample funds and the market proxy using their week end values. The daily returns of the fund and the benchmark were found out using the formulas respectively. Where, NAV_t is the net asset is value of the fund at time t and NAV_{t-1} is the net asset value of the fund at time t-1. Similarly, I_t and I_{t-1} are the value of the market proxy at time t and t-1 respectively.

and

This section describes the data and methodology employed to examine the risk adjusted performance of sector funds. Risk adjusted returns are composite risk - return measures used to determine whether or not the fund's return earned were sufficient compared to those earned by similar portfolios and benchmarks exhibiting a similar level of risk. For better exposition, the task is divided into two sections: measures based on Modern Portfolio Theory and the measures based on down side and relative

risk.

Before proceeding to operational formulae, the notations that are used are summarized here: Rf = Risk-free interest rate; R_p = Return from the portfolio; R_m = Return from the market portfolio; σ = Standard deviation of the returns of fund; β = Market risk of the fund p (beta); P = Number of observations.

Sharpe ratio: The Sharpe Index (1966) developed by William Shape is probably still the most widely employed performance measure in practice. It is a reward to variability ratio and uses the standard deviation as the measure of total risk. All other things being equal, higher Sharpe Index translate into a higher performance and vice -versa. Thus Sharpe ratio can be computed as follows.

Treynor ratio: Treynor Index proposed by Jack Treynor (1965) measures the excess return per unit of systematic risk. It is a reward-to-volatility ratio based on the fact that preferred portfolio lies on the most counter clockwise ray in the expected return-beta space. Higher the index, better is the fund performance and vice-versa. This simply measures a fund manager's ability to choose investments with higher rates of return than others with similar values. Thus Treynor ratio can be computed as

Jensen's Alpha: According to Jensen (1986), equilibrium return on a portfolio would be a benchmark equilibrium return of the portfolio which is correctly priced by the market with respect to systematic risk of the portfolio. It is a regression of excess fund return with excess market return and is expressed as: Where R_p - R_f is the excess return (the raw return less the risk-free rate) on fund, a is a measure of the abnormal performance of fund, β is a measure of the market beta risk for fund; R_m - R_f is the

excess return on a benchmark market index; and 'e' is a mean zero error term. In this model, the intercept ' ' is the Jensen's measure of the fund manager's ability.

Downside and relative risk measures: The following ratios were used in this study to measure the downside and relative risk of mutual funds.

Downside Probability = Total number of negative returns in a period/ Total number of returns in a period.

Sortino ratio: The Sortino ratio, associated with Dr. Frank Sortino is a modification of the Sharpe ratio but penalizes only those returns falling below a required rate of return. The required rate of return is often taken to be the risk free rate of return and was originally known as the minimum acceptable return. Unlike Sortino ratio, Sharpe ratio penalizes both upside and downside volatility equally.

The Sortino Ratio = (Compound Period Return - MAR) / Downside Risk

Information ratio: Also known as appraisal ratio, information ratio is a measure of benchmark relative return gained for taking on benchmark relative risk. To put it differently, it is the signal-to-noise ratio of a fund manager's forecast reflecting the divergence between the performance of the fund and benchmark. The information ratio is calculated as follows:

Where "R" is the portfolio return, 'R_b' is the benchmark return, $\alpha = E\,[R - R_b]$ is the expected value of the active return, and $\omega = \sigma$ is the standard deviation of the active return, which is an alternate definition of the aforementioned tracking error.

ISSN 2076-9202

5 Results and Discussion

The results of risk adjusted performance measures are exhibited in the Table-1. Based on the above analysis and results, among the selected schemes higher Sharpe ratios were found in the FMCG sector funds and banking sector funds. These sectors outperformed the market index. Figure 1 (Appendix) shows the performance of different sectoral funds in comparison to S&P CNX 500. It clearly shows that Banking Sectoral funds and FMCG performed better than the benchmark. While the Sharpe ratios of entire selected infrastructure fund schemes have negative values indicating that this sector underperformed the market index. The selected banking, FMCG and Pharma sector fund schemes recorded positive Treynor ratios, while the infrastructure and power sector fund schemes recorded negative Treynor values. The highest Treynor ratio was found in the Reliance banking fund scheme (0.58) followed by ICICI Prudential technology fund (0.46) and Franklin FMCG fund (0.42). Beta values of higher than unity implies higher portfolio risk for the schemes than the market portfolio, and vice versa. Four schemes namely, Bharati AXA Focused Infrastructure Fund- Growth, L&T Infrastructure Fund-Growth, Tata Infrastructure Fund-Growth and Reliance diversified power sector fund were found to be more risky (*beta >1*) than the market. Remaining schemes had beta in the range of 0.38 to 0.96.

Higher value of R-square shows higher diversification of the schemes portfolio that can easily contain the market variability. The highest R^2 value was found in UTI banking sector fund (0.97) followed by Religare banking fund (0.96) and L&T Infrastructure fund (0.94). These results indicate that these schemes have reasonably exploited the diversification strategy for forming their portfolio. Lower values of R^2 found in the schemes Tata life sciences and technology fund (0.38) and DSP Black Rock technology fund (0.66).

Higher alpha values indicate better performance. Among the selected sector funds,

ISSN 2076-9202

Reliance banking fund scheme (0.20) recorded the highest alpha followed by ICICI Prudential technology fund (0.18) and reliance diversified power sector fund (0.11). The Alpha values of entire selected infrastructure sector fund schemes were negative in comparison with the bench mark. In addition, two schemes of technology sector funds Tata life sciences and technology fund and DSP Black Rock technology fund were also recorded negative alphas. Negative alpha value suggests that the fund managers lack micro forecasting abilities. A close at these deviations exhibit, inter alia, the varied equity selectivity abilities of fund managers for different sectoral schemes.

Downside and relative risk adjusted performance:

The results of Downside and relative risk adjusted performance measures are exhibited in Table-2. Sortino ratio uses a downside risk as a proxy for risk and the target return as the hurdle rate as a proxy for return. The selected Banking, FMCG and Pharma sector fund schemes as well as ICICI Prudential technology fund and Tata life sciences and technology fund schemes have earned excess return to downside risk. While the selected infrastructure and power sector fund schemes have negative Sortino ratio indicating these schemes failed to earn excess return to downside risk. The highest Sortino ratio was found in ICICI Prudential technology fund (0.33) followed by Reliance banking fund (0.28) and ICICI Prudential FMCG fund (0.28).

Information ratio measures the benchmark relative return gained for taking on benchmark relative risk. It measures the active investment manager's skill. Among the entire selected sectoral fund schemes, UTI Energy fund recorded the highest information ratio (0.20) followed by Reliance banking fund (0.16) and ICICI Prudential technology fund (0.14). Based the on the results, it was observed that the selected banking sector and power sector fund schemes have positive information ratio. While the selected FMCG sector and infrastructure fund schemes have negative information ratio. The negative information ratio indicates that a fund underperformed

its benchmark in generating incremental return given the amount of benchmark relative risk taken to earn it. It also signals that fund managers failed to depart from benchmark on account of lack of special information, which otherwise would have resulted in value addition to the benchmark return.

Among all the selected sectors funds, the downside probability of returns is the highest in infrastructure fund schemes as revealed the results. This was followed by the power sector and technology sector funds. On the other hand the least downside probability was observed in the banking sector fund schemes. The highest down side probability was found in the scheme of Bharati AXA Focused Infrastructure Fund-Growth scheme (0.50) followed by UTI Energy fund (0.49) and Escorts Power and Energy fund (0.46).

Table 1: Results of Risk Adjusted Performance Measures Of different Sectoral funds in India.

Scheme Name						
Banking Sector Funds	**Standard Deviation**	**R-square**	**Beta**	**Sharpe Ratio**	**Treynor Ratio**	**Jenson Alpha**
Religare Banking Fund-Growth	3.12	0.96	0.91	0.11	0.37	0.01
Reliance Banking Fund-Growth	3.14	0.88	0.87	0.16	0.58	0.20
UTI Banking sector Fund-Growth	3.13	0.97	0.92	0.11	0.37	0.02
FMCG Sector Funds	**Standard Deviation**	**R-square**	**Beta**	**Sharpe Ratio**	**Treynor Ratio**	**Jenson Alpha**
Franklin FMCG Fund-Growth	2.23	0.68	0.76	0.16	0.42	0.06
ICICI Prudential FMCG-Growth	2.02	0.74	0.80	0.15	0.39	0.03
SBI Magnum FMCG	2.10	0.70	0.77	0.19	0.37	0.08
Infrastructure sector Funds	**Standard Deviation**	**R-square**	**Beta**	**Sharpe Ratio**	**Treynor Ratio**	**Jenson Alpha**
Bharati AXA Focused Infrastructure Fund- Growth	2.74	0.85	1.11	-0.13	-0.32	-0.41
Birla sun life Infrastructure Fund- Plan A- Growth	2.39	0.92	0.99	-0.06	-0.14	-0.19
L&T Infrastructure Fund-Growth	2.48	0.94	1.03	-0.08	-0.19	-0.26

ICICI Prudential Infrastructure Fund-Growth	2.14	0.92	0.88	-0.02	-0.05	-0.09
Tata Infrastructure Fund-Growth	2.38	0.95	1.01	-0.04	-0.11	-0.16
Power Sector Funds	**Standard Deviation**	**R-square**	**Beta**	**Sharpe Ratio**	**Treynor Ratio**	**Jenson Alpha**
Escorts Power and Energy Fund-Growth	2.39	0.79	0.95	-0.14	-0.36	0.02
Reliance Diversified Power sector Fund-Growth	2.50	0.85	1.03	-0.11	-0.26	0.11
UTI Energy Fund-Growth	1.91	0.82	0.77	-0.10	-0.25	0.10
Pharma Sector Funds	**Standard Deviation**	**R-square**	**Beta**	**Sharpe Ratio**	**Treynor Ratio**	**Jenson Alpha**
Franklin Pharma Fund-Growth	1.70	0.86	0.75	0.16	0.36	0.07
Reliance Pharma Fund-Growth	1.93	0.79	0.82	0.10	0.25	0.01
SBI Magnum Sector Umberlla-Growth	1.93	0.84	0.83	0.13	0.30	0.04
Technology Sector Funds	**Standard Deviation**	**R-square**	**Beta**	**Sharpe Ratio**	**Treynor Ratio**	**Jenson Alpha**
Tata Life sciences and Technology fund-Growth	1.82	0.38	0.46	0.019	0.07	-0.08
DSP Black Rock Technology.com Fund- Growth	2.12	0.66	0.72	-0.01	-0.04	-0.21
ICICI Prudential Technology Fund-growth	2.42	0.80	0.89	0.17	0.46	0.18

Ratios have been calculated taking one-year weekly rolling, risk free being 5.5%

Table 2: Results of downside and relative Risk Adjusted performance Measures of different sectoral funds in India.

Scheme Name			
Banking Sector Funds	**Downside Probability**	**Information Ratio**	**Sortino Ratio**
Religare Banking Fund-Growth	0.38	0.02	0.18
Reliance Banking Fund-Growth	0.38	0.16	0.28
UTI Banking sector Fund-Growth	0.38	0.04	0.18
FMCG Sector Funds	**Downside Probability**	**Information Ratio**	**Sortino Ratio**
Franklin FMCG Fund-Growth	0.38	-0.01	0.27
ICICI Prudential FMCG-Growth	0.40	-0.01	0.28
SBI Magnum FMCG	0.42	-0.01	0.25
Infrastrucutre sector Funds	**Downside Probability**	**Information Ratio**	**Sortino Ratio**
Bharati AXA Focused Infrastructure Fund- Growth	0.50	-0.28	-0.19

ISSN 2076-9202

Birla sun life Infrastructure Fund- Plan A- Growth	0.42	-0.267	-0.09
L&T Infrastructure Fund-Growth	0.44	-0.42	-0.12
ICICI Prudential Infrastructure Fund-Growth	0.44	-0.12	-0.03
Tata Infrasturcture Fund-Growth	0.44	-0.25	-0.07
Power Sector Funds	**Downside Probability**	**Information Ratio**	**Sortino Ratio**
Escorts Power and Energy Fund-Growth	0.46	0.04	-0.20
Reliance Diversified Power sector Fund-Growth	0.44	0.12	-0.16
UTI Energy Fund-Growth	0.49	0.20	-0.15
Pharma Sector Funds	**Downside Probability**	**Information Ratio**	**Sortino Ratio**
Franklin Pharma Fund-Growth	0.38	0.03	0.27
Reliance Pharma Fund-Growth	0.42	-0.03	0.19
SBI Magnum Sector Umberlla-Growth	0.39	0.02	0.23
Technology Sector Funds	**Downside Probability**	**Information Ratio**	**Sortino Ratio**
Tata Life sciences and Technology fund-Growth	0.40	-0.10	0.02
DSP Black Rock Technology.com Fund- Growth	0.44	-0.19	-0.02
ICICI Prudential Technology Fund-growth	0.39	0.14	0.33

Ratios have been calculated taking one-year weekly rolling, risk free being 5.5%

6 Conclusion

This paper aims to the measure the performance of different sectoral funds by using both risk adjusted measures and downside measures of total twenty open ended and growth schemes of different sectors such as Banking, FMCG, Power, Pharma and Technology sectors. The result of the study indicates that selected FMCG sector funds and banking sector funds outperformed the market index. These sectoral fund schemes also generated higher positive alpha values among all the selected sectoral funds. While the infrastructure sector fund schemes have underperformed the market index. It was found that selected infrastructure sector fund schemes were the worst performing under both risk adjusted and downside risk measures. Overall, the selected banking and FMCG Sector fund schemes performance ranked high on the basis of

both risk adjusted performance as well as downside risk measures. While, the selected Infrastructure sector fund schemes are ranked least on all performance measures followed by the Technology sector funds. While the performance of Pharma sector funds was ranked medium and found in between these two categories.

References

Dellva, L. W., DeMaskey, A. L., & Smith, C. A. (2001). Selectivity and Market Timing Performance of Fidelity Sector Mutual Funds. *The Financial Review* 36, 39-54.

Gupta, M. C. (1974). The Mutual Fund Industry and its Comparative Performance. *Journal of Finance and Quantitative Analysis*, 9, 5, 891-891.

Jayadev, M. (1996). Mutual Fund Performance: An Analysis of Monthly Returns. *Finance India*, 10, 1, 73-84.

Jensen, M. C. (1968). The Performance of Mutual Funds in the Period 1945- 1964. *Journal of Finance*, 23, 389-416.

Kader, A. M., & Kuang, Y. (2007). Risk adjusted performance, selectivity, timing ability and performance persistence of Hong Kong mutual funds. *Journal of Asia Pacific Business*, 8, 2, 25-58.

Kale, S., & Uma, S. (1995). A Study on the Evaluation of the Performance of Mutual Funds in India. National Insurance Academy, Pune, India. Reference Number DJRS 5/95.

Kallberg, J., Crocker, L., & Charles, T. (2000). The value added from investment managers: An examination of funds of REITs. *Journal of Financial and Quantitative Analysis*, 35, 3, 387-408.

Khorana, A., & Nelling, E. (1997). The Performance, Risk and Diversification of Sector Funds, *Financial Analysts Journal*, 53, 3, 62-74.

ISSN 2076-9202

Muthappan, P. K., & Damodharan, E. (2006). Risk-Adjusted Performance Evaluation of Indian Mutual Fund Schemes. *Finance India*, 10, 3, 965-983.

Sarkar, A. K. (1991). Mutual Funds in India - Emerging Trends. *The Management Accountant*, 26, 3, 171-174.

Sehgal, S., & Jhanwar, M. (2008). On Stock Selection Skills and Market Timing Abilities of Mutual Fund Managers in India. *International Research Journal of Finance and Economics*, 15, 5, 299-309.

Sharpe, W. F. (1966). Mutual Fund Performance. *Journal of Business*, 39, 1, 119-138.

Singla, S. K., & Singh, P. (2000). Evaluation of Performance of Mutual Funds Using Risk-Return Relationship Model, *Indian Journal of Commerce*, 53.

Treynor, J. L. (1965). How to Rate Management of Investment Funds. *Harvard Business Review*, 43, 1, 63-75.

Websites referred

AMFI–Association of Mutual Funds in India.

http://www.amfiindia.com/SiteMap_Po.aspx?pos=Home

NSE – National Stock Exchange of India. *http://www.nseindia.com/index_nse.htm*

Appendix

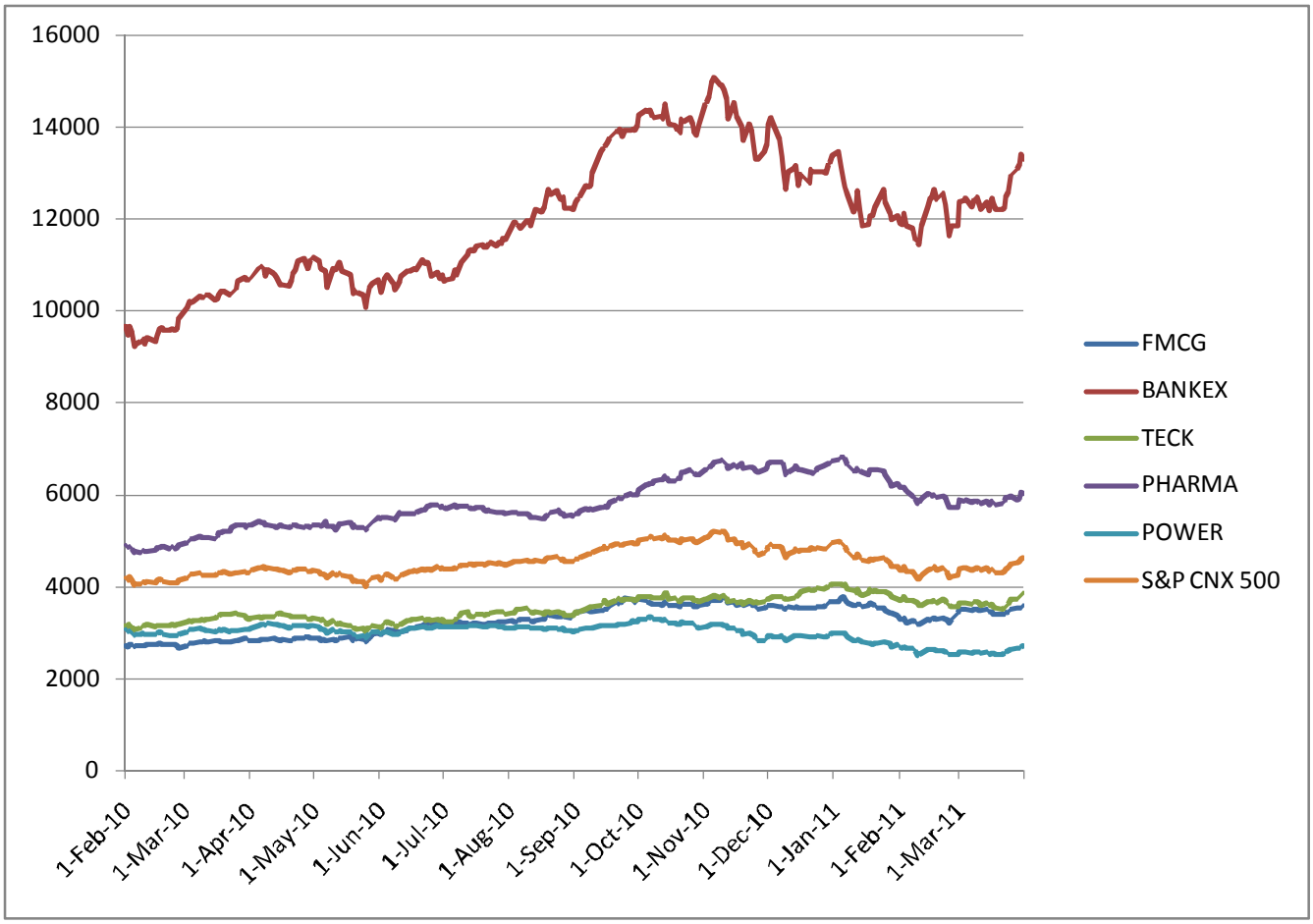


Figure 1. Movement of BSE Sectoral Indices Vs NSE S&P CNX 500

ISSN 2076-9202

Determinants Analysis of Customer Switching Behavior in Private Banking Sector of India

Dr. Arif Anjum
Managing Editor,
Indian Journal of Commerce & Management Studies
anjum_arif@rediffmail.com

Arsalan Mujahid Ghouri
PhD Candidate, Likokwing University, Malaysia
arsalan.ghorui@ymail.com

Dr. Muhammad Abdul Malik
Professor, Federal Urdu University of Arts, Science and Technology, Karachi, Pakistan
E-mail: muhammadabdulmalik@gmail.com

Abstract

This research study investigates the seven factors of customer switching behavior in private bank industry of India. These factors are price, reputation, service quality, effective advertising competition, involuntary switching, distance and switching cost. Two major objectives were fulfilled in the study and for this purpose, in first objective seven hypotheses were tested and for second objective marginal effects of seven factors were analyze. Zheng (2009) study questionnaire tool were employed and 196 respondents were take part in survey. Positive relationship found in unfavorable perception of price/ reputation/ service quality/ effective advertising/ distance and customers' switching banks and negative relationship established in involuntary

ISSN 2076-9202

switching and switching cost and customers' switching banks. Distance ranked most important factor for customer switching and involuntary switching grade least important.

Keywords: Customer satisfaction; Service Marketing; Retail banking; Price;

Advertising;

SERVQUAL; India.

1. Introduction

Old Japanese quote '*okyaku-sama wa kami-sama desu*' which means 'customer is God' sound right for businesses. As they provide the revenue, recognition, reason to existence or even they can stop or cut business operations if they start to appreciate competitor. The companies have to develop new business strategies based on customer-driven value creation to improve productivity and profitability in the new service competition (Grönroos 2000). Clemes et al. (2007) wrote in research study that, new competitors emerged in market with new technologies and strategies, boosting the chances of tough time. With the intense competition and increasing globalization of the financial markets, building customer loyalty has become a critical strategy for most financial institutions (Zheng, 2009). Healthy competition is beneficial for customers but can be depress factor for businesses. As Khan et al. (2010) suggested that customer is the reason of revenue generation; on the other hand,

switching and loyalty of customer generally are two opposite split ends for future profit realization for any company. For the success of businesses loyal customers or retain customers are the main revenue source and their toggle from using particular businesses or services can hurt the performance. Blodgett & Granbois (1992) posited that customers seem to change both their overall behavior and their perceptions about service quality during a long-term relationship, as their perception is influenced by factors that provoke a dynamic behavior. This perception affects the loyalty and initiates the switching behavior into the most influential resource of business.

According to Oyeniyi & Abiodun (2010) customer switching incurred by buyers for stop transaction relationships and initiating a new relation with some other business. Customer switching is negatively related to loyalty of customer with particular product or service. Loyalty normally establishes a stable relationship with an organization compared to non-loyal customers (Zeithaml, et. al, 1996). customers On the other hand, Jones and Sasser (1995) elucidated that a satisfied customer will return for a repurchase.

Banking is the most leading sector of the financial system and plays an essential role in the development and expansion of an economy by offer services such as investment/ managing funds and loans As perspective of India, Balasubramanian (2007) illustrated that,

ISSN 2076-9202

> 'Private sector bank plays an important role in development of Indian economy. The Indian banking industry was dominated by public sector banks. Foreign banks also were permitted to enter Indian banking industry. But now the situations have changed new generation banks with used of technology and professional management has gained a reasonable position in the banking industry. The new generation private sector bank has best used the technology, utilize the manpower in an effective manner.'

For the perspective of banking industry importance as relation with customers, Zhang (2009) study employed to analyze the factors affecting the customer switching of banking industry of India.

1.2 Research Purpose and Objectives

This study will find the switching behavior factors' effect as Zheng (2009) study in private banking industry of India. The main research objectives of this study are:

i. To identify the factors that influence customers switching in the retail banking industry of India.

ii. To determine the most important factor that influence customers switching behavior in the retail banking industry of India.

iii. To determine the least important factor that influence customers switching behavior in the retail banking industry of India.

2. Literature Review

Zhang (2009) study covers price, reputation, service quality, advertising, involuntary switching, distance and switching cost. The price is a fundamental part of the whole service/ product mix and makes consumer expectations about quality of service/ product he/ she going to receive. According to Lam & Lam (2000) economy/ industry/ business dependent on trading and trading is often dependent on price. Price is becoming more and more important for every company especially where competition is intense. Stewart (1998) illustrated that price sensitivity makes important impact on customers switching decisions. In the financial service industry, price has wider implications than in other services industries because money is matter in money issues (Gerrard & Cunningham, 2004). Pricing strategies can build customer satisfaction and retention links. Naveed et al. (2010) study on banking industry of Pakistan revealed positive relationship between an unfavorable perception of price and customers' switching banks.

Reputation has been described an identity of a business in the mind of customer. Reputation is a key asset to firms as it is valuable, distinctive, difficult to duplicate, non-substitutable, and provides the firm with a sustainable competitive advantage (Wang et al., 2003) and plays a key part in measuring customer satisfaction (Naveed et al. 2010). It is an important and intangible resource that can significantly contribute to a firm's performance and its survival (Rao, 1994). Businesses judged by

stakeholders from the first day as they enter into the market. Gibbs et al. (2009) suggested that further reputation is important and customers give more weight to the reputation. Bloemer et al. (1998) study results revealed that image is indirectly related to bank loyalty via perceived quality. Naveed et al. (2010) study on banking industry of Pakistan illustrated positive relationship between unfavorable bank reputation and customers switching banks.

Service can't be transfer or store and intangibility is the key feature of it. Gronross, (1988) exemplified that service simultaneously experiences at the time of occurrence of production and consumption. The banks understand that customers will be loyal if they can produce greater value than competitors (Dawes and Swailes, 1999). High quality of service leads to customer satisfaction and loyalty and greater willingness to suggest and or recommend to someone else, reduction in customer complaints, and improved customer retention rates to a great extent (Zeithaml et al., 1996). In present competitive banking environment, most of the banks offer the same or similar products around the world and service quality is a vital means to differentiate them in the market place.

It has been reported that more than 70% of the defection of customers in the financial services sector is due to dissatisfaction with the quality of services delivered (Bowen and Hedges 1993). Naveed et al posit that positive relationship between

unfavorable good service quality and customers switching banks.

To judge service quality SERVQUAL scale used widely by researchers in academic and applied research settings (Naveed et al. 2010). SERVQUAL scale has five components, tangibles, reliability, responsiveness, assurance and empathy. Zhang (2009), describes 'tangible' are physical facilities and amenities, equipment, and appearance of staff/ personnel, 'reliability' is the capability to carry out the promised service dependably and accurately, 'responsiveness' is the motivation to help customers and endorse service, 'assurance' is knowledge and courtesy of employees and ability to inspire trust and confidence, and 'empathy' is caring such as individualized attention and consideration which the employees provide for its customers. Studies of (Avikiran, 1994; Ennew & Bink, 1996; Donthu and Yoo, 1998; Furrer et al., 2000; Fragata & Muñoz-Gallego, 2010; Naveed et al. 2010) used the SERVEQUAL scale to analyze the banks and other businesses services level.

The magnitude of communications for increasing the sales by acquiring a brand image and increasing has been budding for companies. Advertising is one of the modes of the communication for business. The main aim of advertising is to sell; it helps business, as well as the economy, to prosper and makes the consumer aware of the various choices that are available (Zvomuya, 2011). Any paid form non personal presentation and promotion of ideas, goods or services by an identified sponsor

ISSN 2076-9202

(Kotler & Armstrong, 2003). Cengiz et al. (2007) studied on banks' customer behavior of banks in Turkey and Naveed et al. (2010) finds that advertising improves and amplifies the banks' customer loyalty and helps in retaining customers.

Factors like (change of job/ house, illness), which uncontrollable for businesses or customers which enforced customer(s) to switch called 'involuntary switching'. According to N'Goala (2006), the lack of customer's calculative relationship commitment influenced the consumers' switching. A change in the bank (closing) or customer (move) situation or the opening of competitors' new branches closer to customers' homes or workplaces seem to be seen as opportunities to switch to another service provider and to recover more freedom and independence, as it was previously demonstrated in the resource dependence theory (Pfeffer and Salancik, 1978). Naveed et al. (2010) posit that involuntary switching factors affect customers switching banks. Ganesh et. al, (2000) and found involuntary switching, the most common switching behavior of customers.

In today's daily life customer prefer his preferred brands/ products/ services near to his home or job location, so distance really matter. Convenient, easy and near location could be the first priority for many customers and they forge the other crucial point of service (Naveed et al. 2010). Levesque & McDougall (1996) gave their view about the distance that convenience also contributed positively to customer

satisfaction. Kraut et al. (1990) found that public located nearer in a building was more likely to collaborate. Chiappori et al. (1995) found that geographic transportation costs incurred by consumers as an important constituent of banking competition. Brevoort & Wolken (2008) suggested the close proximity of firms and their financial service suppliers, as well as the frequent use of in person interaction, suggest that the importance of geographic proximity remains. Naveed et al. (2010) found positive relationship between unfavorable perception of distance and customers switching banks.

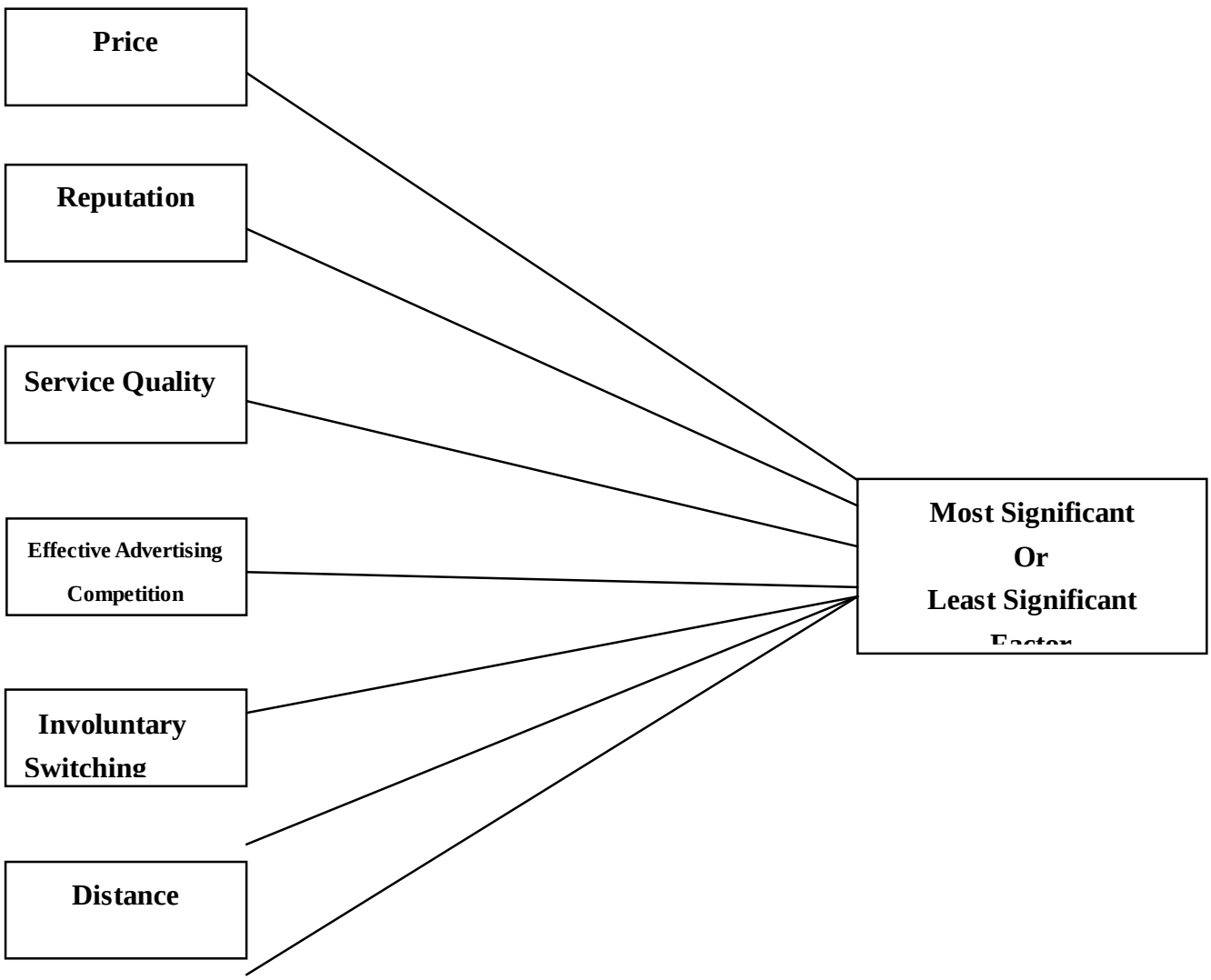
Matthews & Murray (2007) referred switching cost as all financial and non-financial cost occurred in changing suppliers. Switching costs arise from a variety of factors, including the general nature of the product, the characteristics of customers that firms attract, or deliberate strategies and investments by product and service providers (Chen & Hitt, 2002). Consumer switching costs may have important implications for issues arising in macroeconomics international economics and reduce the product variety available to consumers by reducing firms' incentives to differentiate their products in any real (functional) way (Klemperer, 1995). Naveed et al. (2010) showed negative relationship between high switching costs and customers switching bank.

3. Research Methodology

3.1 Theoretical Framework & Objective of the study

Seven factors considered to analyze their effect/ affect, most significant factor to least significant factor and most important factor and least important factor on customers switching in banking industry of India as examined in Zhang (2009) study.

3.2 The Research Framework:



ISSN 2076-9202

Switching Cost

3.3 Hypotheses Development

The hypotheses are develop by the help of Zheng (2009) and Naveed et al. (2010) studies

H1: There is a positive relationship between an unfavorable perception of price and customers' switching banks.

H2: There is a positive relationship between unfavorable bank reputation and customers' switching banks.

H3: There is a positive relationship between unfavorable good service quality and customers' switching banks.

H4: There is a positive relationship between effective advertising competition and customers' switching banks.

H5: Involuntary switching factors affect customers switching banks.

H6: There is a positive relationship between unfavorable perception of distance and customers' switching banks.

H7: There is a negative relationship between high switching costs and customers' switching banks.

3.4 Sampling and Data Collection Procedure

To attain the research objective a self administrative survey which employed in Zheng (2009) was conducted in Nashik District, where 23 major private banks and their branches covered in the study. The data was collected through a convenience sample method, in which respondents were selected randomly. This survey took 31 days to complete in which 358 questionnaires were randomly distributed out of which 211 were returned and 196 were find appropriate for analysis with the response rate of 54.75%. Questionnaires were collected through field survey and questionnaires were also send and received by using email service.

4. Research Findings

4.1 Descriptive results

The overall profile of the participating respondents demographic characteristics is presented in banks.

Table 1. Respondent background

	Frequency	Percentage
Switch within last 3 year:		
Yes	76	38.78%
No	120	61.22%
Gender:		

Male	145	73.98%
Female	51	26.02%

Age:

36 to 45 years	71	36.22%
26 to 35 years	59	30.10%
56 to 65 years	32	16.33%
46 to 55 years	21	10.713%
18 to 25 years	09	04.59%
66 to75 years	09	04.59%
76+ years	05	02.55%

Education:

Bachelor Degree	102	52.04%
Postgraduate Degree	51	26.02%
High School Education	19	09.69%
Diploma & Certificated	09	04.59%
Middle School Education	03	01.53%
Primary Education	02	01.02%
Other	-	-

ISSN 2076-9202

Occupation:

Professional	67	34.18%.
Government Servants	49	25.00%
Self employed	45	22.96%
Students	27	13.78%
Unemployed	05	02.55%
Retired	03	01.53%
Other	-	0.66%

Income:

18,334-28,333 INR/ month	65	33.63% 28,334-38,333
INR/ month	43	21.94%
8,333-18,333 INR/ month	49	25.00%
58,334-68,333 INR/ month	15	07.65%
38,334-48,333 INR/ month	12	06.12%
48,334-58,333 INR/ month	12	06.12%

4.2 Results Pertaining to Research Objective One (Hypotheses 1 through 7)

Logistic regression analysis was used to satisfy Research Objective One. The Table-3 shows the logistic regression results. All predicted factors are statistically significant

(Chi-Square = 222.05, P value = 0.000, Degree of Freedom = 20). Table 5.3: The

Table. 2. Logistic Regression Results for Influencing Factors

Factors	**B**	**S.E**	**Sig.**
Price	0.5703	0.011	0.0000**
Reputation	0.5830	0.129	0.0000**
Service Quality	0.2480	0.176	0.0000**
Effective Advertising Competition	0.6329	0.148	0.0000**
Involuntary Switching,	-0.4222	0.162	0.0000**
Distance	0.7395	0.144	0.0000**
Switching Cost	-0.5463	0.158	0.0000**

** Significant at 0.05 level

Consequently, Hypotheses 1 to 7 are summarized in the following table

Table 3: Hypotheses testing

Summary of Hypotheses Testing Results Hypotheses Result

H1: There is a positive relationship between an unfavorable

perception of price and customers' switching banks. Accept

H2: There is a positive relationship between unfavorable

bank reputation and customers' switching banks. Accept

ISSN 2076-9202

H3: There is a positive relationship between unfavorable good service quality and customers' switching banks. Accept

H4: There is a positive relationship between effective advertising competition and customers' switching banks. Accept

H5: Involuntary switching factors affect customers' switching banks. Accept

H6: There is a positive relationship between unfavorable perception of distance and customers' switching banks. Accept

H7: There is a negative relationship between high switching costs and customers' switching banks. Accept

As shown in table 2 the coefficient value (0.05 level of significance) for all factors Price, Reputation, Service Quality, Effective Advertising Competition, Involuntary Switching, Distance, and Switching Costs are significant. So its shows that all factors make influence on customer switching. In H1 (price), H2 (Reputation), H3 (Service Quality), H4 (between effective advertising competition) and H6 (distance) price factor positively influences customer switching behavior. H5 (Involuntary Switching) and H7 (High Switching Cost) projected that negative relationships align between customers switching behavior and impact factors. .

Research Pertaining to Research Objective Two & Three

Table 3 shows the outcome of research objective two and three by marginal effect of sensitivity analysis.

Table. 3. Marginal Effects of Customers Switching Behavior

Ranking	**Factors' Name**	**Marginal effect**
1	Distance	0.1863
2	Effective Advertising Competition	-0.1729
3	Service Quality	-0.1669
4	Reputation	-0.0973
5	Price	0.0836
6	Switching Cost	-0.0541
7	Involuntary Switching	-0.0445

The marginal effects table 3 demonstrates that 'distance' factor making the maximum effect by probability of 18.6% that a customer will switch bank if distance increases. Furthermore, the figure confirms that second highest impact maker is effective advertising competition and a unit decreases in effective advertising competition will results 17.3% probability that a customer will switch bank. Third highest impact

maker is service quality which has 16.7% probability that a customer will switch bank if a unit decrease in it. At rank 4th, the reputation factor illustrated in list that 8.36% probability for customer will switch if a unit decrease in it. The price factor, switching cost factor and involuntary switching ranked 5th, 6th and 7th respectively.

5. Conclusion & Recommendations

Findings of study shows that customer switching is dependent on the appropriate price according to market, reputation of particular bank in the eyes of customers/ family/ colleagues, excellent service quality, effective advertising campaign, appropriate distance, involuntary switching situation and easiness and tolerable switching cost.

Banks can avoid or minimize the customer switching by applying the strategies according to competition to concentrate on factors like price, reputation, service quality, effective advertising, distance, involuntary switching and switching cost. Every bank can't be fulfill the requirement of every factor so they should concentrate on their strong areas and consider that as their competitive advantage over their competitors.

In objective two, the respondents choose the distance, advertising and service quality as the most important/ significant factors which can enforce them to switch their bank. So these three are the main factor where every bank should concentrate to

avoid loosing the customers.

References:

Avkiran, N. K. (1994), Developing An Instrument to Measure Customer Service Quality in Branch Banking, *The International Journal of Bank Marketing*, 12(6), pp. 10-19.

Balasubramanian, S. M. (2007). Financial Performance of Private Sector Banks in India - An Evaluation (2007). *Working Paper Series*, pp. 1-14 http://ssrn.com/abstract=1044621

Blodgett, J. G. & Granbois, D. H. (1992). Toward an Integrated Conceptual Model of Consumer Complaining Behavior. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 5, pp. 93-103.

Bloemer J., Ruyter K. and Peeters P., (1998), Investigating Drivers of Bank Loyalty: The Complex Relationship between Image, Service Quality and Satisfaction, *International Journal of Bank Marketing*, 16(7), pp. 276 286.

Brevoort, K. P. & Wolken, J. D. (2008). Does Distance Matter in Banking?, Finance and Economics Discussion Series Divisions of Research & Statistics and Monetary Affairs Federal Reserve Board, Washington, D.C.

Chen, P. & Hitt, L. M. (2002). Measuring Switching Costs and the Determinants of Customer Retention in Internet-Enabled Businesses: A Study of the Online Brokerage Industry, *Information Systems Research*,13 (3), pp. 255–274

A Study of the Online Brokerage IndustryChiappori, P., David, P. & Thierry V. (1995). Spatial Competition in the Banking System: Localization, Cross Subsidies and the Regulation of Deposit Rates, *European Economic Review*, 39 (5), pp. 889-918.

Clemes, M. D., Gen, C. Zheng, L. Y. (2007). Customer switching behavior in the New Zealand banking industry, Banks and Bank Systems, 2 (4). pp. 50-65.

Dawes, J. & Swailes, S. (1999). Retention Sans Frontiers: Issues for Financial Service Retailers, *International Journal of Bank Marketing*, 17 (1), pp. 36-43.

Donthu, N., Yoo, B., 1998. Cultural Influences on Service Quality Expectations. *Journal of Service Research,* 1 (2), pp.178-186.

Ennew, C. T. & Binks, M. R. (1996), The Impact of Service Quality Aand Service Characteristics on Customer Retention: Small Business And Their Banks In The UK., *British Journal of Management,* 7(3), pp. 219-230.

Fragata, A. O. S. & Muñoz-Gallego, P. A. (2010). The Importance Of Perceived Service Quality in Banking Loyalty for Large Business Customers, Pecvnia, Monográfico, pp.151-164.

Furrer, O., Shaw-Ching Liu, B. & Sudharshan, D. (2000). The Relationships between culture and Service Quality Perceptions: Basis for Cross-Cultural Market Segmentation and Resource Allocation, *Journal of Service Research*, 2 (4), 355-371.

Gerrard, P. & Cunningham, J. B. (2004). Consumer Switching Behaviour in the Asia Banking MMarket. *The Journal of Service Marketing*, 18(2/3), 215.

Gibbs, M., Tapia, M. & Warzynski, F. (2009). Globalization, Superstars, and Reputation: Theory & Evidence from the Wine Industry, *Journal of Wine Economics*, 4 (1), pp. 49-64

Grönroos, C. (2000). Service Management and Marketing: Managing the Moments of Truth in Service Competition. London: Wiley

Gronroos, C., (1988), Service Quality: The Six Criteria of Good Perceived Service, *Review of Business*, 19(3), pp. 10-13.

Hossain, M. & Leo, S. (2009).Customer Perception on Service Quality in Retail Banking in Middle East: The Case of Qatar, *International Journal of Islamic and Middle Eastern Finance and Management*, 2 (4), pp. 338-350.

Khan, N. R., Ghouri, A. M., Sidduqui, U. A., Shaikh, A. Alam, I. (2010). Determinants Analysis of Customer Switching Behavior in Private Banking Sector of Pakistan, *Interdisciplinary Journal of Contemporary Research in Business,* 2 (7), pp. 96-110.

Klemperer, P. (1995). Competition when Switching have Consumers Costs: An with Applications to Industrial Organization, Overview and Macroeconomics, International Trade, *Review of Economic Studies*, 62, pp. 515-539

Kolter, P. and Armstrong, G., (2003), *Principle of Marketing, Tenth edition*, New Jersey Prentice Hall Inc.

Kraut, R. E., Egido, C. & Galegher, J. (1990). Patterns of Contact and Communication in Scientific Research Collaboration. In J. Galegher & R. E. Kraut (Eds.), Intellectual Teamwork: Social and Technological Foundations of Cooperative Work. Hillsdale, NJ: Lawrence Erlbaum, pp. 149-172.

Lam, K. & Lam, K.C. (2000). Forecasting the Generation of Trading Signals in Financial Markets, *Journal of Forecasting*, 19, pp. 39-52.

N'Goala, G. (2006). How to Make Customers Resist Switching to another Service Provider When a Critical Incident Occurs? The Complementary Roles of Trust and Relationship Commitment, 9th International Research Seminar in Service Management, La Londe les Maures, France

Oyeniyi, J. O. & Abiodun, J. A. (2010). Switching Cost and Customers Loyalty in the Mobile Phone Market: The Nigerian Experience, *Business Intelligence Journal*, 3 (1), pp. 111-121

Rao, H. , (1994), The Social Construction of Reputation: Certification Contests Legitimating and the Survival of Organizations in the Automobile Industry , Strategic Management Journal, 15, pp. 29-44.

Wang, Y. G., Lo, H. P. & Hui, Y. V. (2003). The Antecedents Of Service Quality And Product Reputation: Evidence From The Bank Industry In China, *Managing Service Quality*, 13(1), pp. 72-84

Zeithaml, V.A., Berry, L. & Parasuraman, A. (1996). The Behavioural Consequences of Service Quality. *Journal of Marketing*, 60(2), 31-46

Zhang, D. (2009). Customer Switching Behaviour in the Chinese Retail Banking Industry, Dissertation for the Master of Commerce and Management, Lincoln University, Canterbury, New Zealand

Zvomuya, F. (2011). The Importance of Advertising, *Milk & Juice*, pp. 34-37.

ISSN 2076-9202

UNDESIRABLE OUTPUTS – COST EFFICIENCY IN INDIAN COMMERCIAL BANKS

T.Subramanyam

Teaching Assistant, Department of Statistics, S.V.University, Tirupati, Andhra Pradesh, India, Email: tsmstat2010@gmail.com .

C.S.Reddy[1]

Professor, Department of Statistics, Sri Venkateswara University, Tirupati, Andhra Pradesh, India. Email: csrsvu@yahoo.in

P.Balasiddamuni

Professor, Department of Statistics, Sri Venkateswara University, Tirupati

ABSTRACT

Failure to recognize undesirable outputs under states the cost efficiency of a decision making unit, in this case a commercial bank. Price inefficiency is found pervading the public, private and foreign sector banks as they fail to procure their inputs at constant prices. Non-performing assets (NPA) is an undesirable output that harms the performance of a commercial bank. This study decomposes economic efficiency of 63 commercial banks into the product of price, risk and Farrell input cost efficiency.

The foreign sector banks operate relatively in a risk free environment but at relatively high price inefficiency. The public sector banks operate at a relatively high risk environment.

[1] Corresponding author, Ph-: +919703793344, E_Mail: csrsvu@yahoo.in

ISSN 2076-9202

Keywords: DEA, Non-Performing Assets, Cost efficiency, Price efficiency and Risk efficiency.

JEL Classification: G21.

1. INTRODUCTION:

Price inefficiency is a common factor of every input and output market of decision making units. Owing to a number of reasons production units employing similar inputs to produce similar outputs procure their inputs at prices variable over DMUs, and market their outputs at variable prices. This environment prevails in financial markets such as commercial banks where funds are traded. Commercial banks funds buying and selling are vulnerable due to interception of money policies of Reserve Bank of India, and fiscal policies of the government. To reduce inflation rate government's expenditure is reduced, cash revenue ratio (CRR) is increased and fund buying rates of interest are increased. To counter recession things above are reversed.

Deposit mobilization and lending are two prime activities of every commercial bank. The later activity produces valuable as well as non-performing assets.

Banks are modeled differently by analysts viewing them as financial intermediaries between depositors and borrowers, producers of deposits and loans and non-interest income combining inputs like staff, fixed assets (comprised of premises, information technology and non-interest expenses), where deposits and loans proxy services to

customers partly.

Banks can be modeled similarly under 'user cost approach' which determines whether a financial product is an input or output on the basis of its net contribution to bank's revenue. If returns on a financial product exceed the opportunity cost then it is treated as output, otherwise input, as such NPA may be treated as 'input'.

The objective of this study is to treat non-performing assets as an undesirable output and to measure its impact on input cost efficiency of a decision making unit, in the present case a commercial bank.

Suppose a commercial bank employs m-inputs to produce s-desirable outputs and one undesirable output, viz., non-performing assets (NPA), which we shall denote by u_b. Treating the additive inverse of u_b as a desirable output is a transformation.

To measure efficiency of decision making units, Charnes et.al (1978), for the first time introduced a multiplier problem. But the roots of this method were found in the seminal contributions of Farrell (1957) and Shepherd (1970).

2. Data Envelopment Models:

A variant of CCR multiplier problem in the present context is,

$$\text{Max } Z = \sum_{r=1}^{s} \mu_r u_{r0} - \mu_{s+1} u_b$$

subject to

$$\sum_{i=1}^{m} \upsilon_i x_{i0} = 1 \qquad \text{---------- (1)}$$

$$\sum_{r=1}^{s} \mu_r u_{rj} - \sum_{i=1}^{m} \upsilon_i x_{ij} \le 0, \quad j = 1,2,\ldots,n$$

The objective function measures input technical efficiency. The dual of the multiplier problem is the following DEA problem:

$$\lambda_b = \text{Min } \lambda$$

subject to

$$\sum_{j=1}^{n} \lambda_j x_{ij} \le \lambda x_{i0} \quad , \quad i = 1,2,\ldots,m \qquad \text{---------- (2)}$$

$$\sum_{j=1}^{n} \lambda_j u_{rj} \ge u_{r0}, \quad r = 1,2,\ldots,s$$

$$\sum_{j=1}^{n} \lambda_j u_{bj} \le u_{b0}$$

Due to duality between the two problems the extremities of the objective functions are equal. The envelopment problem treats undesirable output as non-discretionary input whose control is not in the hand of bank management.

If NPA are ignored the envelopment problem takes the form,

$$\lambda_g = \text{Min } \lambda$$

subject to

$$\sum_{j=1}^{n} \lambda_j x_{ij} \le \lambda x_{i0}$$

$$\sum_{j=1}^{n} \lambda_j u_{rj} \ge u_{r0}$$

$$\lambda_j \ge 0$$

---------- (3)

Clearly, $\lambda_g \le \lambda_b$

Failure to recognize undesirable output under estimates input technical efficiency.

Fare et.al (1985) formulated a linear programming problem to assess input cost efficiency of decision making units. In the absence of NPA, factor minimal cost can be obtained solving the following linear programming problem:

$$Q(u_0, p_0) = \underset{x}{\text{Min}} \sum_{i=1}^{m} p_{io} x_i$$

subject to

$$\sum_{j=1}^{n} \lambda_j x_{ij} \le x_i \quad , \; i = 1,2,\ldots,m$$

$$\sum_{j=1}^{n} \lambda_j u_{rj} \ge u_{ro} \quad , \quad r = 1,2,\ldots,s$$

---------- (4)

The factor minimal cost in the presence of NPA can be estimated solving the linear programming problem:

$$Q(u_0, -u_{b0}, p_0) = \underset{x}{\text{Min}} \sum_{i=1}^{m} p_{io} x_i$$

subject to

$$\sum_{j=1}^{n} \lambda_j x_{ij} \le x_i \quad , \; i = 1,2,\ldots,m$$

$$\sum_{j=1}^{n} \lambda_j u_{rj} \ge u_{ro} \quad , \quad r = 1,2,\ldots,s$$

$$\sum_{j=1}^{n} \lambda_j u_{bj} \le u_{b0}$$

$$\lambda_j \ge 0.$$

-- ---------- (5)

Clearly,

$$Q(u_0, p_0) \le Q(u_0, -u_{b0}, p_0)$$

$$0 \le \frac{Q(u_0, p_0)}{Q(u_0, -u_{b0}, p_0)} \le 1$$

A commercial bank achieves price efficiency if it procures its inputs at minimum prices. These minimum prices can be picked up from the observed prices faced by the banks in competition.

Let $p_i^{min} = \underset{1 \le j \le n}{\text{Min}} p_{ij}$, $i = 1,2,\ldots,m$

These prices were used by A.S.Camanho and R.G.Dyson (2008) in an attempt to estimate price or market efficiency of decision making units.

A commercial bank with zero NPA, procures inputs at minimum prices, its factor minimal cost at these prices is,

$$Q(u_0, p^{min}) = \underset{x}{Min} \sum_{i=1}^{m} p_i^{min} x_i$$

subject to

$$\sum_{j=1}^{n} \lambda_j x_{ij} \le x_i \quad , \; i = 1,2,\ldots,m \qquad \text{---------- (6)}$$

$$\sum_{j=1}^{n} \lambda_j u_{rj} \ge u_{ro} \quad , \quad r = 1,2,\ldots,s$$

$$\lambda_j \ge 0$$

This cost is incurred under the most ideal conditions, which can be decomposed as follows:

$$\frac{Q(u_0, p^{min})}{\sum_{i=1}^{m} p_{i0} x_{i0}} = \left(\frac{Q(u_0, p^{min})}{Q(u_0, p_0)} \right) \left(\frac{Q(u_0, p_0)}{Q(u_0, -u_{b0,} p_0)} \right) \left(\frac{Q(u_0, -u_{b0,} p_0)}{\sum_{i=1}^{m} p_{i0} x_{i0}} \right)$$

1. $\frac{Q(u_0, p^{min})}{Q(u_0, p_0)}$, measures price efficiency.

2. $\frac{Q(u_0, p_0)}{Q(u_0, -u_{b0,} p_0)}$, measures risk factor due to NPA.

3. $\frac{Q(u_0, -u_{b0,} p_0)}{\sum_{i=1}^{m} p_{i0} x_{i0}}$, measures efficiency attributable to Farrell cost measure.

$$Q(u_0, p^{min}) \le Q(u_0, p_0) \le Q(u_0, -u_{b0,} p_0) \le \sum_{i=1}^{m} p_{i0} x_{i0} \qquad \text{---------- (7)}$$

Banker and Morey (1986) discussed the impact of non-discretionary inputs on

efficiency of decision making units. Let us consider a variation of (1) and (2) and denote them as $(1')$ and $(2')$.

$$\text{Max} \quad \sum_{r=1}^{s} \mu_r u_{r0} - \mu_{s+1} u_{b0}$$

subject to

$$\sum_{r=1}^{s} \mu_r u_{rj} - \upsilon_{s+1} u_{bj} - \sum_{i=1}^{m} \upsilon_i x_{ij} \le 0, \quad j = 1,2,\ldots,n$$

$$\sum_{i=1}^{m} \upsilon_i x_{i0} = 1$$

$$\mu_r \ge \varepsilon, \quad r = 1,2,\ldots,s$$

$$\upsilon_i \ge \varepsilon, \quad i = 1,2,\ldots,m$$

$$\upsilon_{s+1} \ge 0$$

---------- $(1')$

The dual version of the above problem is,

$$\text{Min} \ \theta - \varepsilon\left(\sum_{i=1}^{m} s_i^- + \sum_{r=1}^{s} s_r^+\right)$$

subject to

$$\sum_{j=1}^{n} \lambda_j x_{ij} + s_i^- = x_{i0}\,\theta \ , \quad i = 1,2,\ldots,m$$

$$\sum_{j=1}^{n} \lambda_j u_{rj} - s_r^+ = u_{r0}, \quad r = 1,2,\ldots,s$$

$$\sum_{j=1}^{n} \lambda_j u_{bj} + s_b^- = u_{b0}$$

$$\lambda_j \ge 0, \quad j = 1,2,\ldots,n$$

---------- $(2')$

The input variables in the control of management are discretionary inputs. Non-discretionary variables are exogenously fixed.

Except θ all variables are constrained to be non-negative, $\varepsilon > 0$ implies that the slack variables are to be handled at a second stage where, they are maximized in a manner that does not disturb the previously determined first stage minimization of θ to achieve $\theta = \theta^*$. s_b^- is not included in the objective function, therefore s_b^-

does not enter directly into the efficiency measure. They can, nevertheless, affect the efficiency evaluations by virtue of their presence in the constraints.

Since the extremities of the objective functions are equal we write,

$$\theta^* - \varepsilon\left(\sum_{i=1}^{m} s_i^{-*} + \sum_{r=1}^{s} s_i^{+*}\right) = \sum_{r=1}^{s} \mu_r^* u_{r0} - \mu_{s+1}^* u_{b0} \qquad \text{---------- (8)}$$

If the last constraint in $(2')$ is equality, then $s_b^{-*} = 0$, which implies due to complementary slackness theorem, $s_b^{-*}\mu_{s+1}^* = 0$. If μ_{s+1}^* is positive an increase in NPA will reduce input technical efficiency.

$$Q(u_0, -u_b, p_0) = \min_x \sum p_i^0 x_i$$
$$\text{subject to } \sum_j \lambda_j x_{ij} \le x_i$$
$$\sum_j \lambda_j u_{rj} \ge u_{r0}$$
$$\sum \lambda_j = 1$$

Taking NPA into account as undesirable output, or non-discretionary input, Farrell cost efficiency is expressed as,

Farrell Cost Efficiency : $\dfrac{Q(u_0, -u_b, p_0)}{\sum p_{i0} x_{i0}}$

3. DATA

The first and most important step in data envelopment analysis is specification of inputs and outputs. The analyst shall be parsimonious while he adds inputs and outputs to DEA data list. DEA looses discriminatory power in the presence of too many inputs and outputs with which a commercial bank is modeled, since a greater

proportion of banks emerge with 100% efficiency score. Alternatively, too small a number of inputs and outputs fail to model the financial institution adequately. While exercising parsimony the analyst shall be cautious that the input and output selection is suitable to fulfill his objectives.

The data used in the present study are collected from Reserve Bank of India Bulletins (2007). Number of employees and fixed assets are inputs. Deposits are one output variable, but several studies do exist which considered this as an input variable. However, this study views collection of deposits a resource consuming activity, so that it has an 'output' status. Loans and advances are another output variable and we avoided selecting interest income as an output because, loans and advances and interest income are heavily correlated (r = 0.997) which is very highly significant. Further, the underlying linear relationship posses 'zero' intercept. Therefore, in addition to loans and advances, if non-interest income is used as an output, the efficiency distribution is found to be relatively stable. Bank's inputs do produce non-interest income due to diversifying activities different from deposit collection and advancing loans. Non-interest income is chosen as an output variable.

A commercial bank's investments, for example, in government securities, mutual funds etc., is another output variable. Activities of a commercial bank create non-performing assets (NPA), which are chosen as undesirable output. The 'user cost approach' identify NPA as input since returns from them are less than their opportunity cost. This study views NPA as a non-discretionary input whose shocks are assumed exogenous to commercial bank's performance.

The input and output data are collected from balance sheets submitted by the commercial banks to the Reserve Bank of India.

Total wage bill of a bank is divided by the number of employees to arrive at wage rate. Cost of funds proxy the unit price of fixed assets.

ISSN 2076-9202

4. Empirical Analysis

Failure to recognize non-performing assets in cost efficiency assessment, under estimates factor minimal cost, consequently the Farrell cost efficiency. NPA measures the risk factor of commercial banks. It does not upset cost efficiency uniformly the public, private and foreign sector banks. Imputing a negative weight an undesirable output in CCR multiplier problem, reflects the status of this variable as a non-discretionary input whose variation is capable to influence not only the input technical efficiency, but also the input cost efficiency.

The most idealistic situation at a bank can operate is that its prices are minimum, no NPA prevails and factors of production minimize cost of production. Consequently, the cost incurred may be expressed as, $Q(u_0, p^{\min})$, where u_0 and $p^{\min}$ are the output vector and minimum (market efficient) price vector respectively. For any commercial bank the factor minimal cost at ruling prices is $Q(u_0, p_0)$, in the absence of NPA, which is larger than $Q(u_0, p^{\min})$. The ratio $Q(u_0, p^{\min})/Q(u_0, p_0)$ measures the price efficiency of the targeted commercial bank. The following table displays factor minimal costs under different hypotheses and the observed cost for 63 commercial banks.

No commercial bank operated procuring its inputs at minimum prices. The mean price efficiency revealed that the private commercial banks hired employee services and created fixed assets at relatively lower prices compared to the public and foreign sector banks. The price efficiency score is the poorest for the foreign sector banks, implying that what it paid to the factors that it has employed is considerably higher.

Price efficiency

Sector	Minimum	Maximum	Mean	Standard Deviation	Coefficient of Variation
Public Sector Banks	0.3963	0.6568	0.4827	0.0598	12.3913
Private Sector Banks	0.2713	0.9316	0.5141	0.1605	31.2217
Foreign Sector Banks	0.0451	0.6997	0.2190	0.1736	79.2385

It is always desirous to know the extent by which NPA harms the performance of a commercial bank. Inclusion of NPA as an undesirable output (or non-discretionary input or quasy fixed input) dramatically increased the factor minimal cost. The ratio $Q(u_0, p_0)/Q(u_0, -u_{b0}, p_0)$ measures the risk factor due to NPA, and larger scores imply lower risk. The mean of this ratio is largest for foreign sector banks (=0.8238). Risk factor as revealed by the ratio $Q(u_0, p_0)/Q(u_0, -u_{b0}, p_0)$ is larger in public sector banks compared to the foreign and private sector banks.

Risk Efficiency

Sector	Minimum	Maximum	Mean	Standard Deviation	Coefficient of Variation
Public Sector Banks	0.2305	0.6627	0.5630	0.0763	13.5470
Private Sector Banks	0.5404	1.0000	0.6861	0.1426	20.7831
Foreign Sector Banks	0.5602	1.0000	0.8238	0.1882	22.8433

The ratio $Q(u_0, -u_{b0}, p_0) \Big/ \sum_{i=1}^{m} p_{i0} x_{i0}$ measures the traditional Farrell cost efficiency. Failure to include NPA under estimates the cost efficiency of a commercial bank, since,

$$Q(u_0, p_0) \leq Q(u_0, -u_{b0}, p_0)$$

Among nationalized banks the State Bank of India and the IDBI Ltd are the only

banks which enjoy cost efficiency. The Bank of Tokyo-Mitsubishi, Citi Bank, Deutsche Bank and JB Morgan Chase Bank are Farrell cost efficient among foreign sector banks.

The ICICI Bank emerges to be the only Farrell cost efficient bank among 23 private sector banks.

Farrell Cost Efficiency

Sector	Minimum	Maximum	Mean	Standard Deviation	Coefficient of Variation
Public Sector Banks	0.3172	1.0000	0.4908	0.1677	34.1648
Private Sector Banks	0.0563	1.0000	0.4222	0.2357	55.8331
Foreign Sector Banks	0.2087	1.0000	0.7032	0.3027	43.0368

The following table displays price, risk and cost efficiency scores individually for 63 Indian commercial banks comprising public, private and foreign sector banks:

DMU	Bank Name	$\frac{Q(u_0, p^{min})}{Q(u_0, p_0)}$	$\frac{Q(u_0, p_0)}{Q(u_0, -u_{b0}, p_0)}$	$\frac{Q(u_0, -u_{b0}, p_0)}{\sum_{i=1}^{m} p_{i0} x_{i0}}$
Nationalized Banks				
1	State Bank of India	0.4154	0.2305	1.0000
2	State Bank Bikaner & Jaipur	0.4188	0.6029	0.3826
3	State Bank of Hyderabad	0.4491	0.5735	0.5180
4	State Bank of Indore	0.5023	0.6211	0.4878
5	State Bank of Mysore	0.4899	0.6145	0.3630
6	State Bank of Patiala	0.4900	0.6024	0.5589
7	State Bank of Saurashtra	0.5735	0.5901	0.3471

8	State Bank of Travancore	0.5140	0.5998	0.4269
9	Allahabad Bank	0.5548	0.5622	0.4607
10	Andhra Bank	0.4421	0.5779	0.4750
11	Bank of Baroda	0.3963	0.5754	0.5119
12	Bank of India	0.4388	0.5879	0.4589
13	Bank of Maharashtra	0.5084	0.5734	0.3915
14	Canara Bank	0.6568	0.4193	0.4755
15	Central Bank of India	0.5623	0.5382	0.3467
16	Corporation Bank	0.5228	0.5835	0.5697
17	Dena Bank	0.4601	0.5779	0.4161
18	IDBI Ltd.	0.4786	0.6627	1.0000
19	Indian Bank	0.4178	0.5551	0.3512
20	Indian Overseas Bank	0.4173	0.5812	0.4553
21	Oriental Bank of Commerce	0.4764	0.5676	0.7029
22	Punjab & Sind Bank	0.4372	0.5604	0.3172
23	Punjab National Bank	0.4399	0.5827	0.3862
24	Syndicate Bank	0.4336	0.5597	0.5119
25	UCO Bank	0.5093	0.5820	0.4237
26	Union Bank of India	0.5488	0.5819	0.5018
27	United Bank of India	0.5077	0.5379	0.3460
28	Vijaya Bank	0.4528	0.5623	0.5552
Foreign Sector Banks				
29	ABN Amro Bank	0.1826	0.6825	0.7869
30	Abu Dhabi Commercial Bank	0.1372	1.0000	0.8759
31	American Express Bank	0.2637	0.5602	0.2147

ISSN 2076-9202

32	Bank of Bahrain & Kuwait	0.3269	1.0000	0.3568
33	Bank of Ceylon	0.6997	1.0000	0.2081
34	Bank of Tokyo-Mitsubishi UFJ	0.1182	1.0000	1.0000
35	Chinatrust Commercial Bank	0.2649	1.0000	0.5921
36	Citi Bank	0.1536	0.7151	1.0000
37	Deutsche Bank	0.0451	0.6099	1.0000
38	Hongkong & Shanghai Banking Corporation	0.1740	0.6280	0.7356
39	JB Morgan Chase Bank	0.0464	1.0000	1.0000
40	Standard Chartered Bank	0.2160	0.6900	0.6685
Other Scheduled Commercial Banks				
41	Axis Bank	0.4158	0.5404	0.9109
42	Bank of Rajasthan	0.4195	0.5579	0.3957
43	Catholin Syrian Bank	0.5364	0.6553	0.2298
44	Centurion Bank of Punjab	0.9316	0.5809	0.1753
45	Citi Union Bank	0.6830	0.7780	0.3057
46	Development Credit Bank	0.4218	0.6585	0.3098
47	Dhanalakshmi Bank	0.5429	0.7266	0.2576
48	Federal Bank	0.3994	0.5999	0.5435
49	HDFC Bank	0.4724	0.5660	0.5029
50	ICICI Bank	0.3393	0.6473	1.0000
51	Induslnd Bank	0.4670	0.5514	0.9028
52	Ing Vysya Bank	0.3729	0.6564	0.4369
53	Jammu & Kashmir Bank	0.5616	0.5781	0.5796
54	Karnataka Bank	0.6465	0.5437	0.5044

ISSN 2076-9202

55	Karur Vysya Bank	0.5889	0.6345	0.4319
56	Kotak Mahindra Bank	0.2713	0.6945	0.3234
57	Lakshmi Vilas Bank	0.5819	0.6798	0.3674
58	Lord krishna Bank	0.8895	0.8940	0.1496
59	Ratnakar Bank	0.4395	1.0000	0.1354
60	Sangli Bank	0.5574	1.0000	0.0563
61	SBI Comm.& Intl Bank	0.3595	1.0000	0.3260
62	South Indian Bank	0.4883	0.5850	0.4820
63	Tamilnad Mercantile Bank	0.4369	0.6508	0.3778

5.CONCLUSIONS:

A.S.Camanho and R.G.Dyson (2008) defined price efficiency and a method of decomposing a modified cost efficiency into the product of input price and Farrell cost efficiency. We have extended this decomposition into the product of price, risk and Farrell cost efficiencies.

Foreign sector banks are found hiring inputs at much higher prices than the private and public sector banks. The private sector banks are found enjoying greater price efficiency.

The risk due to NPA is felt stronger in public sector banks than private and public sector banks. When compared the foreign sector banks control risk due to NPA better than private and public sector banks.

Two banks in public, one bank in private and four banks in foreign sector are found to be Farrell cost efficient. In terms of proportions foreign sector appears to be more Farrell cost efficient than public and private sector banks.

ISSN 2076-9202

REFERENCES

[1]. Andrew Hughes and Suthathip Yaisawarng (2004). Sensitivity and Dimensionality tests of DEA Efficiency Scores, European Journal of Operational Research, 154, pp 410-422.

[2]. Banker R.D., Charnes, A., and W.W. Cooper (1984). Some models for estimating technical and scale efficiencies in a Data Envelopment Analysis, Management Science, 30, pp 1078-1092.

[3]. Charnes, A., W.W.Cooper and Rhodes, E (1978). Measuring the efficiency of Decision making Units, European Journal of Operational Research, 2, pp 429-444.

[4]. Comanho, A.S., and Dyson, R.G., (2008). A generalization of the Farrell cost efficiency measure applicable to non-fully competitive settings, Omega 36, pp 147-162.

[5]. Comanho, A.S., and Dyson, R.G., (2005). Cost efficiency measurement with price uncertainty: A DEA application to bank branch assessments, European Journal of Operational Research, 161, pp 432-446.

[6]. Farrell, M.J. (1957). Measurement of Productive Efficiency, Journal of the Royal Statistical Society, Series A, 120, pp 253-290.

[7]. Fare, R., Grosskopf, S., and Lovell C.A.K, (1985). The Measurement of Efficiency of Production, Kluwer Academic Publications', Boston.

ISSN 2076-9202

[8]. Necmi K. Avkiran., (2009). Removing the impact of environment with units-invariant efficient frontier analysis: An illustrative case study with intertemporal panel data, Omega, 37 (3), 535-544.

[9]. P.L.Brackett, A.Charnes, W.W.Cooper, Z.Hung and AB San (1997). Data transformation in DEA Cone Ratio Envelopment Approaches for Monitoring Bank Performance, European Journal of Operational Research, 98, pp 250-268.

[10]. Reserve Bank of India (2007). Reserve Bank of India Bulletins, Govt., of India.

ISSN 2076-9202

"Escalating Foreign Direct Investment (FDI) through e-commerce: Issues involving for the development of e-commerce in Bangladesh"

[1]Mohammad Ashraful Ferdous Chowdhury, **Atikur Rahman Baizid**, **[2]**.

[1] Shahjalal University of Science & Technology, Sylhet, Bangladesh.

[2] Leading University, Sylhet, Bangladesh

** Corresponding author: Tel: +8801912702643*

E-mail: ashraful_ferdous@yahoo.com

Abstract: Bangladesh is a developing country. Foreign direct investment (FDI) is very important for the Sustainable Development of Bangladesh. Due to the globalization, e-business is increasing. Since the distance is reduced due to the world wide internet connectivity. Now it is easy to communicate one person to another person from one state to another state. So, e-commerce can be implemented successfully in the developing countries like Bangladesh. For making the export and import sectors of Bangladesh lucrative, Now-a-days it is very essential to control these sectors electronically. The life cycle centers around the major e-commerce applications: business–to-consumer done on the internet; business–to-business done on the internet and extranets; and business–within-business done on the intranet. Now it is essential to develop the infrastructure for introducing e-commerce with foreign countries. This paper argues that the national and international growth of e-commerce (whether business–business, business–consumer or consumer–business) can increase a critical technology infrastructure gap that disadvantages less-developed countries (LDCs) in their future e-commerce participation. This gap is linked to the type as well as the volume of FDI which economies at different levels of development attract. Security, new computer viruses, satisfaction of the consumers, customer relationship,

ISSN 2076-9202

and lack of blueprint for handling e-commerce are the major limitations in this sector. To ensure successful e-commerce, technology based realistic strategy is the most important. To build up the standard e-commerce, we need to establish a community of loyal customers keep track of their needs and performance, make our site responsible, easy to use and easy to navigate. The main theme of this paper is to study the scope, preparedness and challenges of e-commerce in Bangladesh for the development of FDI in Bangladesh.

Keywords: *FDI, E-commerce, Telecommunication, Business, Development.*

1.1 Introduction

Economic development is the main feature of the modern world. For the existence of Bangladesh, there is no option without attaining economic development. Foreign Direct Investment (FDI) is recognized as a key component for economic growth for Bangladesh. Being one of the Least Developed Countries (LDC) with insufficient domestic savings rate for investment after fulfilling its basic needs, the importance of foreign investment is unquestionable. FDI will create employment, increase efficiency of labor, encourage technology transfer and develop new exportable sector. To attract more and more FDI the government of Bangladesh has been trying to establish private investment friendly environment. A number of opportunities have been given by the Government of Bangladesh to attract foreign investors to invest in the country in some prospective sectors. Since Bangladesh has no sufficient domestic savings for investment, FDI is the most significant tool for its economic development. Though Bangladesh is like an LDC there are a lot of opportunities to attain economic development by undertaking some initiatives. FDI is one of them. In the first part of this is to open the present features of FDI in Bangladesh.

FDI is defined as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate). FDI

ISSN 2076-9202

implies that the investor exerts a significant degree of influence on the management of the enterprise resident in the other economy. Such investment involves both the initial transaction between the two entities and all subsequent transactions between them and among foreign affiliates, both incorporated and unincorporated. FDI may be undertaken by individuals as well as business entities. Flows of FDI comprise capital provided (either directly or through other related enterprises) by a foreign direct investor to an FDI enterprise, or capital received from an FDI enterprise by a foreign direct investor. FDI has three components: equity capital, reinvested earnings and intra-company loans.

As a market, e-commerce is a world wide network. A local store can open a web storefront and find the world at its doorstep-customers, suppliers, competitors and payment service. In contrast e-business means connectivity critical business system directly to critical constituencies via the internet, Extranets and intranets [1]. Through the successful implementation of e-commerce in FDI, Bangladesh can be developed fro the develop ping country. The basic needs of human beings are food, cloth, house, education and health. Telecommunication, Especially mobile sector already developed in Bangladesh through the FDI. The main theme of this paper is to discuss the future potential of FDI through the effective use of e-commerce. There are some examples of companies who implemented e-commerce successfully. These are [1]
www.hermitagemuseum.org Russia's historic St. Petersburg museum uses a digital library and high resolution imaging to put 2000 pieces of art online.
www.usopen.org This site for the U.S. Open tennis tournament handled a billion hits in 1 year.
www.servicearizona.com This custom application for the state of Arizona lets drivers renew their auto registration online.
www.shwab.com Schwab customers trade over $2 billion dollars per day online. The system allows customers to buy and sell securities, tap into research, and ask questions over the Net. The web service has generated over 1 million online accounts totaling $70 billion dollars in assets. Some successful E-commerce sites [4] of the world are:
U.S. Government (e-commerce site) http://www.ecommerce.gov/
Bilateral Statements http://www.ecommerce.gov/joint_statements.htm
U.S.T.R (E-commerce Site) http://www.ustr.gov/sectors/e-commerce.shtml

Asia-Pacific Economic Cooperation (APEC) http://www.apecsec.org.sg/

European Union http://europa.eu.int/ISPO/ecommerce/

ISSN 2076-9202

1.2 Objective of the study:

Due to globalization through the effective use of ICT, the internet users are increasing day by day. Fig -1 shows this. For this reason e-commerce is becoming easier for our citizens. Now the learned people of our country are interested to get the benefits of e-commerce. At the same time foreign investors becoming interested to invest in our country due to the low labor cost, infrastructural development etc. The main objective of this paper is to promote e-commerce in a third world country like Bangladesh (having 160million people) in order to maximize FDI.

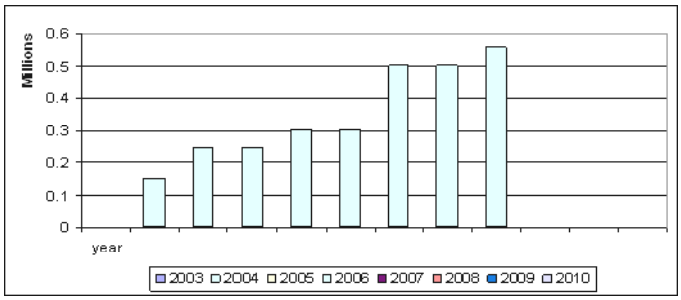


Fig-1: Number of internet users by year wise [8]

1.3 Methodology

This paper is fully based on secondary information. In this paper we have used the content analysis method that is used the review of the previous literature. Some information has been collected from the daily newspapers. Apart from that secondary information have been collected from the statistics department of Department of Bangladesh Bank, Investment Handbook of Bangladesh Investment, Bangladesh Economic Review 2006 to 2010, and Bangladesh Bank's Annual report 2006 to 2010, world investment report etc.

2. Results & Discussions:

2.1 Inflows of foreign direct investment

Foreign Direct Investment (FDI) has played a key role in the modernization of the Bangladesh economy for the last 15 years. There was an inflow of $666m foreign direct investment in 2007 which rose significantly in 2008 to $1086m [5]. As of June 2009, inflows of foreign direct investment recorded to $358m.

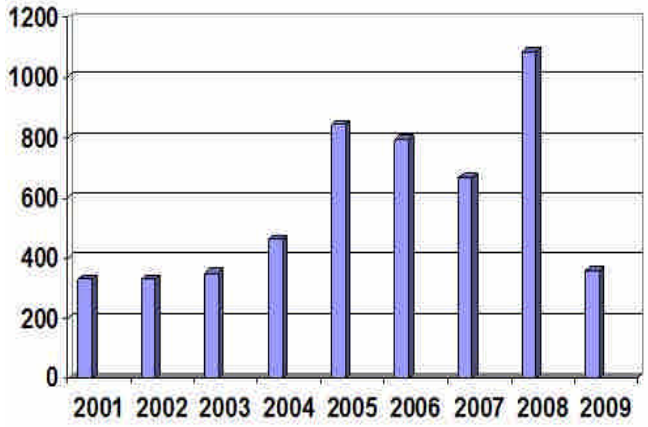


Fig 1: Inflows of foreign direct investment during 2001-2009

2.2 Investment climate:

Bangladesh offers an unparalleled investment climate compared to the other South Asian economies. Here are eight key pointers to Bangladesh's investment climate today.

- **Industrious low-cost workforce**

Bangladesh offers a well-educated, highly adaptive and industrious workforce with the lowest wages and salaries in the region. 57.3% of the population is under 25, providing a youthful group for recruitment. The country has consistently developed a skilled workforce catering to investors needs. English is widely spoken, making communication easy.

- **Strategic location, regional connectivity and worldwide access**

Bangladesh is strategically located next to India, China and ASEAN markets. As the South Asian Free Trade Area (SAFTA) comes into force, investors in Bangladesh will enjoy duty-free access to India and other member countries.

- **Strong local market and growth**

Bangladesh has proved to be an attractive investment location with its 146.6 million population and consistent economic growth leading to strong and growing domestic demand.

- **Low cost of energy**

Energy prices in Bangladesh are the most competitive in the region. Transportation on green compressed natural gas is less than 20% of the diesel price.

- **Proven export competitiveness**

Bangladesh enjoys tariff-free access to the European Union, Canada, Australia and Japan. In Europe, Bangladesh enjoys 60% of the market share and is the top manufacturing exporter amongst 50 least developed countries.

- **Competitive incentives**

Bangladesh offers the most liberal FDI regime in South Asia, allowing 100% foreign equity with unrestricted exit policy, easy remittance of royalty, and repatriation of profits and incomes.

- **Export processing zones**

Bangladesh offers export-oriented industrial enclaves with infrastructural facilities and logistical support for foreign investors. The country is also developing its core infrastructures, including roads, highways, surface transport and port facilities for a better business environment.

FDI Magazine of The Financial Times in March 2010 conducted a competition under the head "Global Ranking Competition of Economics Zones". In this competition out of 700 Economic Zones globally 200 participated in the competition. All the zones were evaluated on a 10 point scale on the basis of some set criteria. Among the top 10 of the two categories Chittagong Export Processing Zone, Bangladesh scored 3rd position in the "Best Cost Effectiveness" and also 4th position in the "Best Economic Potential" for 2010-2011. Source: http://www.fdiintelligence.com

2.3 Impact of FDI in Bangladesh through e-commerce:

Lower cost E-commerce for FDI is cost effective, reduces the logistical difficulties. Every financial transaction is turned into electronic process using online banking system.

Economy E-commerce for FDI is economical. There is no need of rental of physical space, Insurance, or infrastructure investment rather than need a partner to do fulfillment. Every thing will be automated electronically.

Higher Margins when the manual transactions are done electronically e-commerce ensures higher margins. For example for the manual processing of air lines ticket if it needed of 1000 taka. then electronically it will take 1taka.

Better customer service E-commerce ensures better and quicker customer service. Through internet, customer can access the web merchant in a better way.

Productivity gains E-commerce gains productivity. For example IBM which incorporated the web into every corner of the firm-Products, Marketing and practices. They save $750 million by better customers find answering to technical questions via its website.

Team work E-commerce helps people to work together, for example e-mail through which we can transform information, communicate with suppliers, vendors, business partners and customers. More communication means better results.

Information sharing, convenience and control e-commerce ensure information

sharing with merchants and customers and promote quick, just – in-time deliveries. Convenience is the main focusing point for he consumers. Consumers can save money through online 24 hours communications , 7 days a week, get no traffic jams, no crowds, need not have to carry heavy shopping begs. It is easy to Control a business through internet; controlling banking via internet web sites.

2.4. Infrastructural part of e-commerce for escalating FDI in Bangladesh

There are four dimensions of e-commerce these are Business-to-Business (Internet and Extranet), Business-to-Consumer (Internet), and Business-within–Business (Intranet), and Business -to-Government. Internet services are presently available in Bangladesh. Its usage for e-commerce by the Bangladeshi producers to export as well as to access imports will be dependent on their Willingness and ability to use this medium as well as that of the buyers of final products and the sellers of intermediate goods and services.

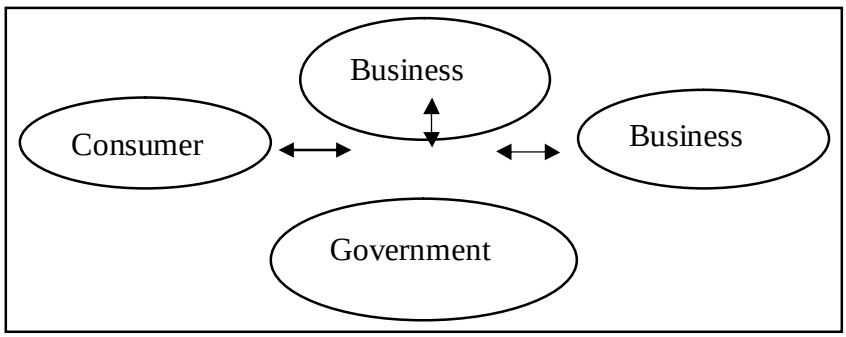


Figure 2: The Four Dimensions of E-Commerce

The Main focusing point of E-commerce that we have discussed in this paper are Electronic payment system and its architecture and Electronic securities which are discussed below:

2.4.1 Electronic Payment system and its Architecture:

A typical electronic payment system is shown in Figure 3. In order to participate in a particular electronic payment system, a customer and a merchant must be able to access the Internet and must first register with the corresponding payment service provider. The provider runs a payment gateway that is reachable from both the public network (e.g., the Internet) and from a private interbank clearing network. The payment gateway serves as an intermediary between the traditional payment infrastructure and the electronic payment infrastructure. Another prerequisite is that

the customer and the merchant each have a bank account at a bank that is connected to the clearing network. The customer's bank is usually referred to as the issuer bank [6]. The term issuer bank denotes the bank that actually issued the payment instrument (e.g., debit or credit card) that the customer uses for payment. The acquirer bank acquires payment records (i.e., paper charge slips or electronic data) from the merchants [6]. When purchasing goods or services, the

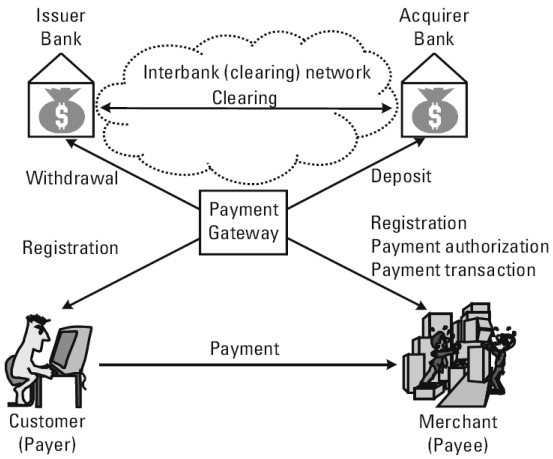


Fig 3: E-payment system

customer (or payer) pays a certain amount of money to the merchant (or payee). Let us assume that the customer chooses to pay with his debit or credit card. Before supplying the ordered goods or services, the merchant asks the payment gateway to authorize the payer and his payment instrument (e.g., on the basis of his card number). The payment gateway contacts the issuer bank to perform the authorization check. If everything is fine, the required amount of money is withdrawn (or debited) from the customer.s account and deposited in (or credited to) the merchant.s account. This process represents the actual payment transaction. The payment gateway sends notification of the successful payment transaction to the merchant so that he can supply the ordered items to the customer. In some cases, especially when low-cost services are ordered, the items can be delivered before the actual payment authorization and transaction have been performed.

2.4.2 Payment Instruments:

Payment instruments are any means of payment. The traditional payment instruments are Paper money, credit cards, and checks. Electronic payment systems are: electronic money (also called digital money) and electronic checks. These are described below by the following figures:

\A. Credit Cards:

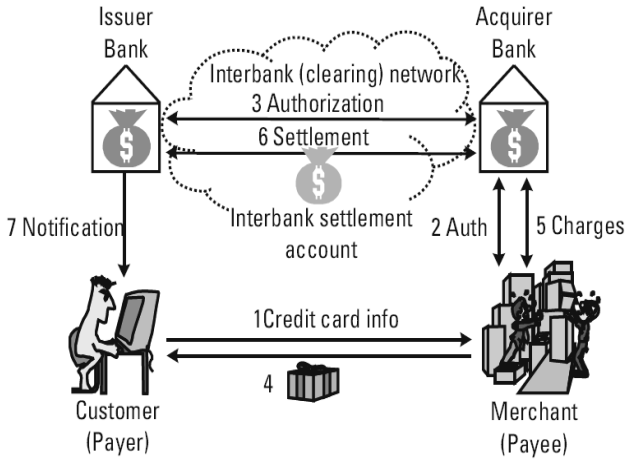


Fig 4: A credit card payment transaction.

B. Electronic Money:

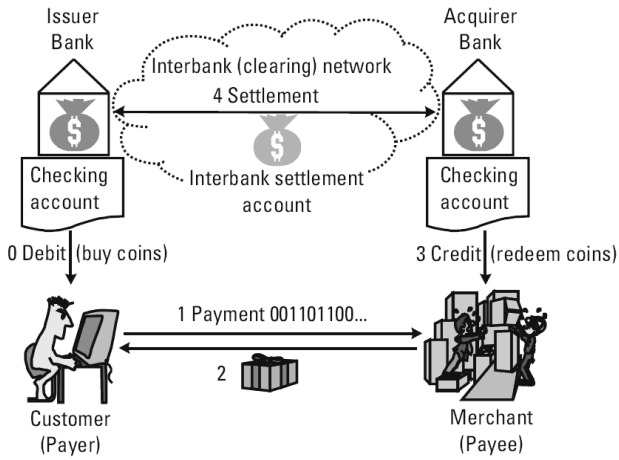
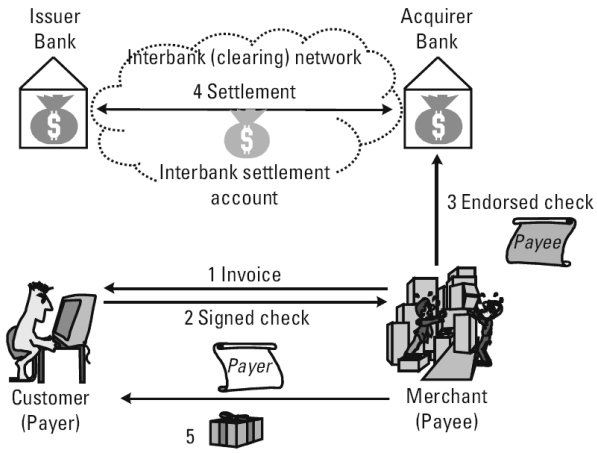


Fig: 5 An electronic money payment transaction.

C. Electronic Check:



ISSN 2076-9202

Fig 6: An electronic check payment transaction.

2.4.2 Electronic Payment Security

It is sometimes considered that IT (Information Technology) security to be the main obstacle to widespread use of e-commerce many people do take that view, however, mainly because of the frequent reports on security incidents and denial-of-service attacks. One positive consequence of such attacks is that certain governments have now recognized the importance of a common network security infrastructure, because vulnerabilities at one place on the network can create risks for all. The security problems of traditional payment systems are well known [6]:

- Money can be counterfeited;
- Signatures can be forged;
- Checks can bounce.

Electronic payment systems have the same problems as traditional systems, and more [6]:

- Digital documents can be copied perfectly and arbitrarily often;
- Digital signatures can be produced by anybody who knows the private key;
- A payer's identity can be associated with every payment transaction.

Obviously, without additional security measures, widespread e-commerce is not viable. A properly designed electronic payment system can, however, provide better security than traditional payment systems, in addition to flexibility of use. Generally, in an electronic payment system, three types of adversaries can be encountered [7]:

1. Outsiders eavesdropping on the communication line and misusing the collected data (e.g., credit card numbers);
2. Active attackers sending forged messages to authorized payment system participants in order either to prevent the system from functioning or to steal the assets exchanged (e.g., goods, money);
3. Dishonest payment system participants trying to obtain and misuse payment transaction data that they are not authorized to see or use.

The basic security requirements for electronic payment systems can be summarized as:

- Digital signature mechanisms;
- Access control mechanisms;
- Data integrity mechanisms;

ISSN 2076-9202

- Authentication exchange mechanisms;
- Routing control mechanisms;
- Notarization mechanisms.

2.5 Telecommunications: An example of FDI through E-Commerce

Access, pricing, and the quality of Internet services are critically dependent on the status and performance of the telecommunications sector. The government has demonstrated the need for increased participation of the private sector in the production and delivery of telecommunication services. Although the Bangladesh Telegraph and Telephone Board (BTTB) continues to be a monopoly in providing basic telephone connections, the private sectors involvement in cellular phones and as Internet Service Providers (ISP) have been allowed. Private sector participation in improving and widening the telecommunication infrastructural facilities has also been accepted. In the backdrop of the public-private mix, the legal and regulatory environment plays a key role in the type of market structure under which this sector will perform. The prevailing statutes and their implementation will play an important role in bringing local and foreign investments, infusion of technology, and dictate the level of competition among the providers of telecommunication services relating to the Internet. The National Telecommunications Policy (NTP98) was enacted in 1998. NTP98 aims at major reforms in the telecommunication sector by the local and foreign investors. With the objective of improving the quality and availability of services, NTP98 emphasizes infusion of technology (e.g. digitalization), greater access across the country, and a competitive framework. NTP98 suggests establishment of an independent regulator, Bangladesh Telecommunications Regulatory Commission (BTRC). Foreign investors has alredy invested in this sector such as Grameen Phone(Norway), Banglalink(Egypt), Robi(Malaysia).From this telecom sector ten percent revenue has come in 2010. 60% FDI have been injected from the telecom sector in 2010 in Bangladesh.

ISSN 2076-9202

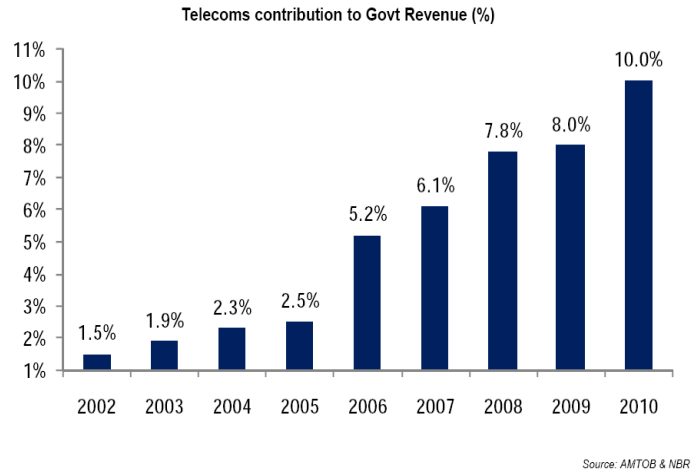


Fig: Telecoms sector major contributor of Tax Revenues

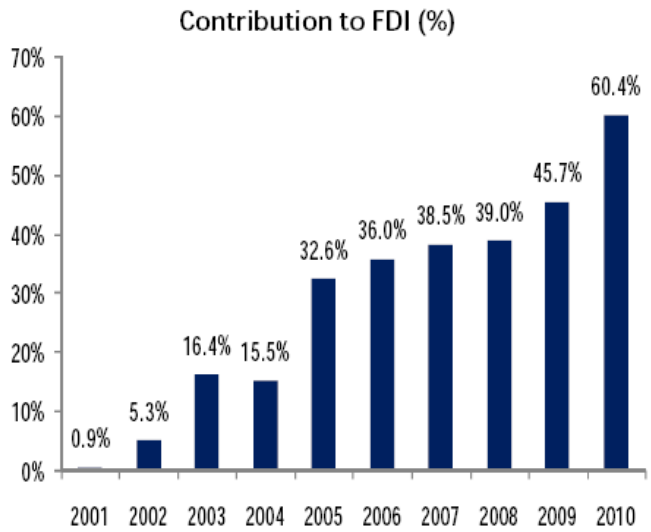


Fig: Bangladesh Bank

3. Drawbacks/ Problems of Implementing E-commerce

This paper highlights various constraints to ecommerce. Many of these constraints are common across the business sector and demands major reforms through strong political commitment and an ability to implement policy changes. A list of specific constraints to e-commerce summarized below:

(i) Lack of Power deficit

(ii) Lack of English and computer literacy,

(iii) Insufficient Managerial talents,

(iv) Lack of insufficient internet connectivity,

(v) Absence of encryption law that precludes acceptance of digital

(vi) Signature,

(vii) Strong dependence of Letter of Credit to conduct international transactions

(viii) Non-issuance of international credit cards for cross border transactions,

(ix) Interest rate ceiling on export loans,

4. Recommendation & Conclusion

Short term

- IT declared as a thrust sector
- Waiver on all taxes and duties on the importation of computer hardware and software to increase affordability and proliferation of PC use in Bangladesh
- Bangladesh Telecommunications Regulatory Commission (BTRC) should be established independent of the government control.
- VSAT operating licenses should not limit the bandwidth.

Medium term:

- Basic telephony in private sector should be allowed for nationwide operations.
- Posting of government documents and publications including budgetary information on the Web should be instructed.
- Contracts and other alternates to Letter-of-Credit (L/C) should be allowed as legal methods for international transactions.
- Foreign exchange controls on travel and for business should be relaxed.

Long term:

- For Implementing E-commerce to maximize FDI, It is urgent to produce sufficient power supply for the sustainable investment climate.
- Tax holiday for software and IT services companies.
- One hundred percent remittance on profit and capital gains for foreign investors without any approval.
- Laws that allow encryption should be developed, thereby paving the way for authenticating transactions electronically.
- Government officials are to be oriented on the benefits of e-commerce. For instance short course can be offered at training centers such as the Public Administration Training Center (PATC).
- Political commitment to improve governance and institutional strengthening are essential for successful application of e-commerce

ISSN 2076-9202

- Deregulation of the process of acquisition and use of VSAT to facilitate faster, cheaper, and higher-bandwidth connections and to encourage widespread Internet use

Conclusion:

Liberalizing the telecom and IT sectors as well as reforming the country's financial and commercial procedures is the preconditions of successfully implementing ecommerce in Bangladesh. In the case of marketing, simply having a website in the vast sea of the Internet is not sufficient. Uniformity is an important factor in the commencing of contracts through the Internet. Banks, customs and other supporting institutions, along with the entrepreneurs exporting goods and services will have to accommodate the external demands in order to maintain competitiveness and open new global opportunities. Creating awareness among the Bangladeshi exporters regarding e-commerce is essential. They have to be knowledgeable to appreciate and to utilize the benefits of IT. Technological and infrastructural constraints to e-commerce can be overcome if existing laws and regulations are implemented. A better understanding of the potential benefits of e-commerce by the policy makers and bureaucrats is essential for increasing FDI to achieve vision 2021

Reference

[1] Elias.M.Awad, Electronic Commerce from Vision to Fulfillment, Asoke K. Ghosh, Prentice Hall of India Private Limited. 2003.
[2] Najmul Hossain, E-Commerce in Bangladesh: Status, Potential and Constraints. December 2000.
[3] Judith E. Payne, E-Commerce Readiness for SMEs in Developing Countries: A Guide for Development Professionals, Agency for International Development (USAID), 2009.
[4] Stuart S. Malawer, Global Governance of E-commerce and Internet Trade: Recent Developments, International law section, 2001.
[5].http://boi.gov.bd/about-bangladesh/investment-and-trade/foreign-direct-investment-in-bangladesh as on 14th february, 2011
[6] Asokan, N., et al., .The State of the Art in Electronic Payment Systems,. IEEE Computer, Vol. 30, No. 9, 1997, pp. 28.35.
[7] Bellare, M., et al., .Design, Implementation and Deployment of a Secure Account-Based Electronic Payment System,. Research Report RZ 3137, IBM Research

Division,
June1999,http://www.zurich.ibm.com/Technology/Security/publications/1999/BGHHKSTHW.ps.gz. 78 Security Fundamentals for E-Commerce
[8] http://www.indexmundi.com/bangladesh/internet_users.html as on 14th February, 2011

ISSN 2076-9202

Indian Mutual Fund Industry in the first decade of 21st Millennium

Ms. Vanipriya .R Research scholar Dept of Management Studies, Vels University

Dr.Venkatramaraju.D Reader and Research Guide, Pachaiyappa's College, Chennai-30.

ABSTRACT

The Indian mutual fund industry has witnessed significant growth in the past few years driven by several favorable economic and demographic factors such as rising income levels and the increasing reach of Asset Management Companies (AMCs) and distributors. Recent developments triggered by the global economic crisis have served to highlight the vulnerability of the Indian mutual fund industry to global economic turbulence and exposed our increased dependence on corporate customers and the retail distribution system. It is therefore an opportune time for the industry to dwell on the experiences and develop a roadmap through a collaborative effort across all stakeholders, to achieve sustained profitable growth and strengthen investor faith and confidence in the health of the industry. Building investors' trust and increased customer Awareness through initiatives aimed at promoting financial literacy will be Critical factors towards building greater retail participation. This paper summarizes the current state of the 'Indian mutual fund Industry ' highlighting kinds of mutual fund, reason for selecting and not selecting mutual fund for investment purposes, the

ISSN 2076-9202

key challenges and issues.

Key Notes: Classification of Mutual Funds, Indian Mutual Fund Industry – The Current State, Mutual Fund Firms in India, Challenges and Issues, Distribution Channels

Introduction

Mutual Fund was introduced in the year 1963 in India. UTI is the first concern to deal with mutual fund in India. The **performance of mutual fund** started going high after liberalization in the country. Mutual Fund came into existence in India in the year 1963. Unit trust of India was the first association to launch the concept of Mutual Fund in India. It invited a lot of investors to invest in UTI Mutual Funds in order to make savings. UTI Mutual Fund ruled India for around 30 years and there were no competitors till 1988 when some new mutual fund companies came into existence.

Classification of Mutual Funds in India is done on the basis of their objective and structure. Classification of Mutual Funds in India has helped to categorize them into major types such as Funds of Funds, Regional Mutual Funds, Closed- End Funds, Large Cap Funds, and Interval Funds.

- Interval Funds
- Income Funds
- Tax Saving Funds

ISSN 2076-9202

- Sector-Specific Funds
- Fixed-Income Funds
- Closed-End Funds
- Open-End Funds
- Large Cap Funds
- Mid-Cap Funds
- Equity Funds
- Balanced Funds
- Growth Funds
- No Load Funds
- Exchange Traded Funds
- Value Funds
- Money Market Funds
- International Mutual Funds
- Regional Mutual Funds
- Sector Funds
- Index Funds
- Fund of Funds

ISSN 2076-9202

Mutual Fund Firms in India

Mutual Fund Firms in India offer different kinds of mutual funds to suit the varying needs of investors. The Mutual Fund Firms in India are regulated by the AMFI.

The mutual fund firms in India offers a wide variety of mutual funds, each tailor made to suit the need of the investor. Today, there are plenty of mutual fund firms in India catering to the need of the investors and the numbers of such firms are growing steadily.

- India Growth Fund
- NJ India Invest
- SUN F&C
- ABN AMRO Mutual Fund
- AIG Global Investment Group Mutual Fund
- Benchmark Mutual Fund
- Birla Mutual Fund
- BOB Mutual Fund
- Canara Robeco Mutual Fund
- DBS Chola Mutual Fund
- Deutsche Mutual Fund
- DSP Merrill Lynch Mutual Fund

ISSN 2076-9202

- Escorts Mutual Fund
- Fidelity Mutual Fund
- Franklin Templeton Investments
- HDFC Mutual Fund
- HSBC Mutual Fund
- ICICI Prudential Mutual Fund
- JM Financial Mutual Fund
- JP Morgan Mutual Fund
- Kotak Mahindra Mutual Fund
- LIC Mutual Fund
- Lotus India Mutual Fund
- Morgan Stanley Mutual Fund
- PRINCIPAL Mutual Fund
- Quantum Mutual Fund
- Reliance Mutual Fund
- Sahara Mutual Fund
- SBI Mutual Fund
- Standard Chartered Mutual Fund
- Sundaram Mutual Fund

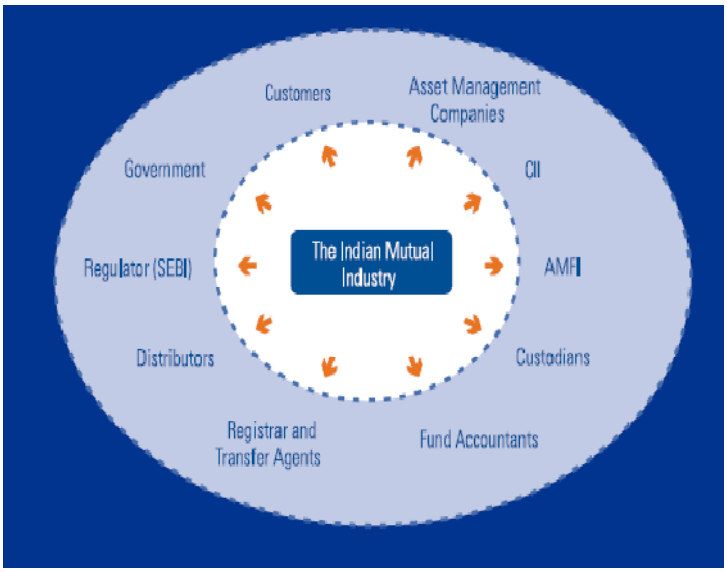
ISSN 2076-9202

- Tata Mutual Fund
- Taurus Mutual Fund
- UTI Mutual Fund
- ING Mutual Fund

The Indian Mutual Fund Industry – The Current State

The Indian mutual fund industry has evolved from a Single player monopoly in 1964 to a fast growing, Competitive market on the back of a strong regulatory framework.

Fig-I : Key stakeholders of the mutual fund industry



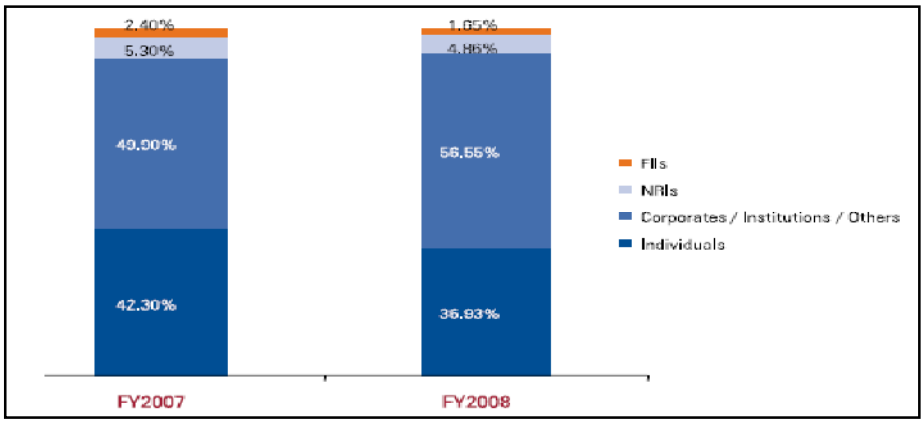
The Indian Mutual Fund Industry – Key Characteristics

ISSN 2076-9202

(1) Customers

Retail Investors comprising 96.86 percent in number terms held approximately 37 percent of the total industry AUM as at the end of March 2008, significantly lower than the retail participation in the US at 82 percent of AUM as at December 2008.

Fig-II :Indian Mutual Fund Industry – Industry Investor Mix



Source: SEBI data

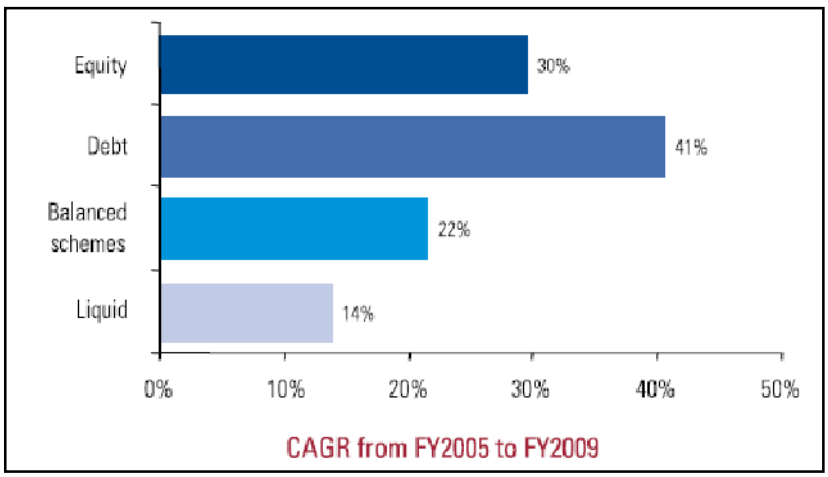
Out of a total population of 1.15 billion, the total Number of mutual fund investor accounts in India as of 31 March 2008 was 42 million (the actual number of Investors is estimated to be lower as investors hold Multiple folios. As per the Invest India Incomes and Savings Survey 2007 of individual wage earners in the age group 18 to 59 years conducted by IIMS Dataworks, only 1.6 Percent invested in mutual funds. Ninety percent of the Savers interviewed were not aware of mutual funds or Of investing in mutual funds through a Systematic Investment Plan .

ISSN 2076-9202

(2) Products

The Indian mutual fund industry is in a relatively nascent stage in terms of its product offerings, and tends to compete with products offered by the Government providing fixed guaranteed returns. As of December 2008, the total number of mutual fund Schemes was 1,002 in comparison to 10,349 funds in the US. Debt products dominate the product mix and Comprised 49 percent of the total industry AUM as of FY 2009, while the equity and liquid funds comprised 26 percent and 22 percent respectively. Open-ended Funds comprised 99 percent of the total industry AUM as of March 2009.

Fig-III :Growth Rate (Five year CAGR) across Fund Categories



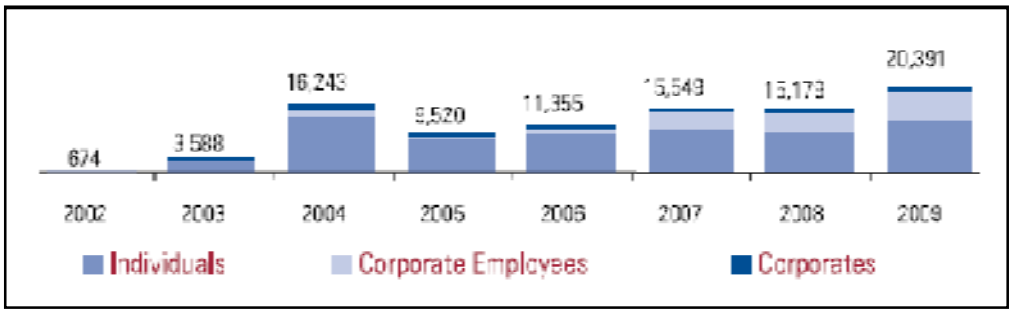
Source: AMFI data

(3) Markets

While the mutual fund industry in India continues to be Metro and urban centric, the

mutual funds are Beginning to tap Tier 2 and Tier 3 towns as a vital Component of their growth strategy. The contribution of the Top 10 cities to total AUM has gradually declined from approximately 92 percent in 2005 to Approximately 80 percent currently.

Fig-IV Number of Distributors by Category Registered Annually by AMFI

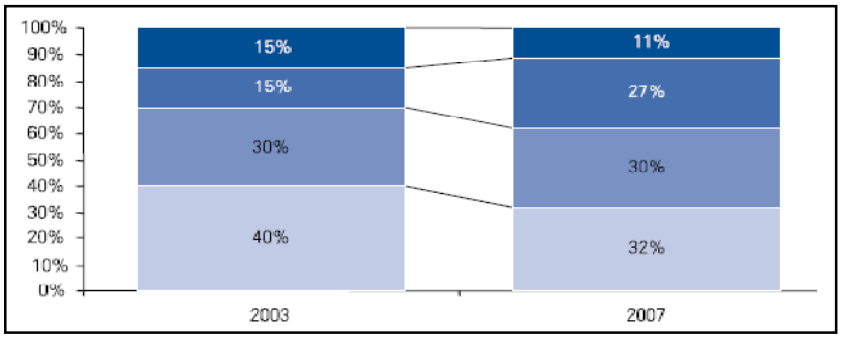


Source: AMFI data

Distribution Channels

As of March 2009, the mutual fund industry had 92,499 registered distributors as compared to approximately 2.5 million insurance agents. The Independent Financial Advisors(IFAs) or Individual distributors, Corporate employees and Corporate comprised 73, 21 and 6 percent respectively of the total distributor base. Banks in general, foreign banks and the leading new Private sector banks in particular, dominate the mutual Fund distribution with over 30 percent AUM share. National and Regional Distributors (including broker dealers) together with IFAs comprised (30+27)57 percent of The total AUM as of 2007.

Fig-V Distribution Channel Mix

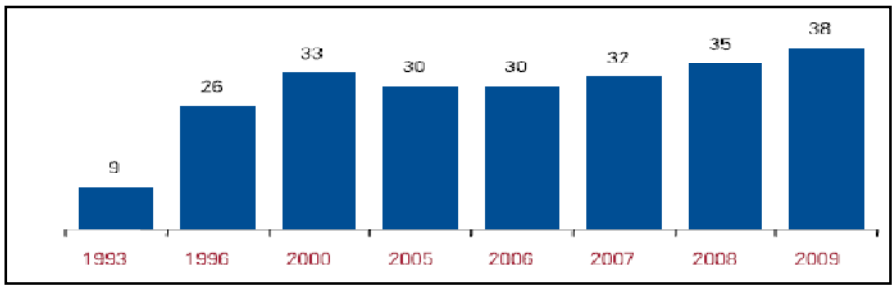


Source: CII Mutual Fund Summit 2008

Industry Structure

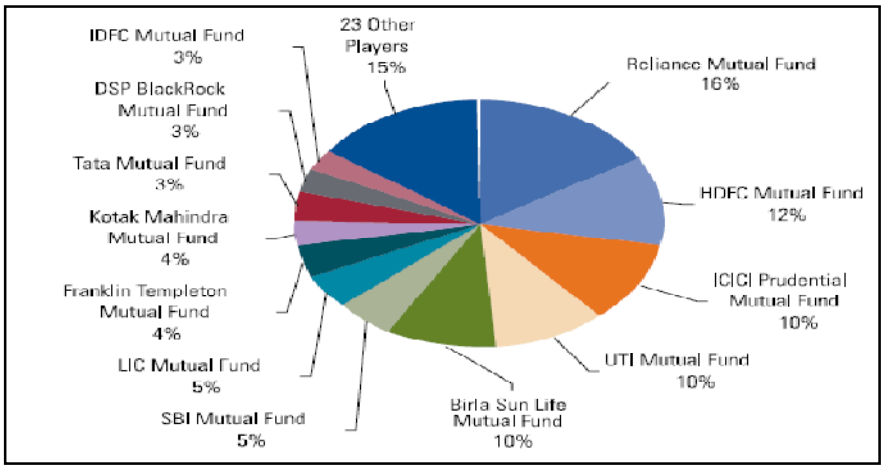
The Indian mutual fund industry currently consists of 38 players that have been given regulatory approval by SEBI. The industry has witnessed a shift has changed drastically in favour of private sector players, as the number of public sector players reduced from 11 in 2001 to 5 in 2009.

Fig-VI Growth in the Number of AMCs in India



Source: AMFI data

Fig -VII Market

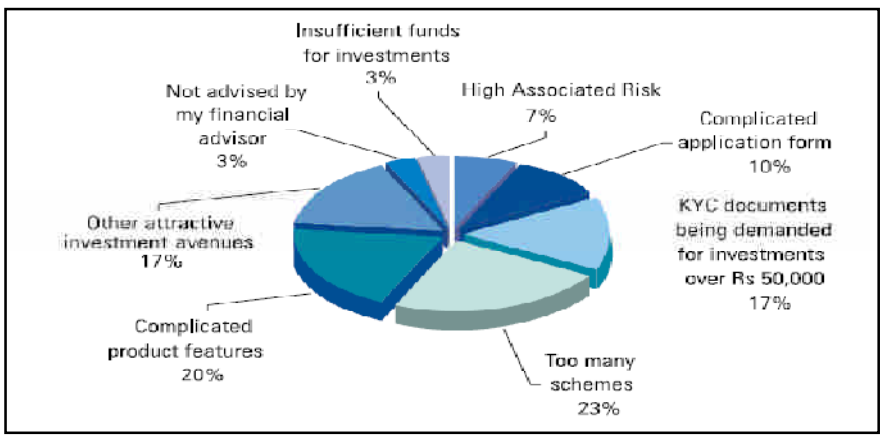


Source: AMFI data

Share of Players as of March 2009

The market leaders have focused across product categories for a more diversified AUM base with an equitable product mix that helps maintain a consistent AUM size. Although the Indian market has relatively low entry barriers given the low minimum networth required to venture into mutual fund business, existence of a strong local brand and a wide and deep distribution footprint are the key differentiators.

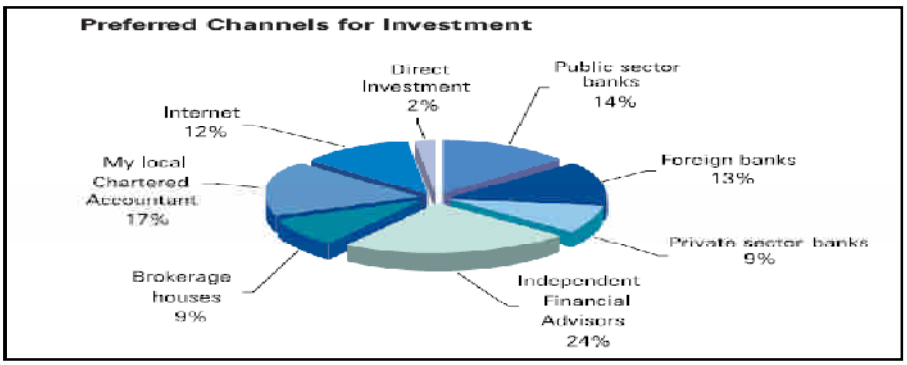
Fig-VIII Reasons provided by Survey Respondents for not investing in Mutual Funds



Source: Survey

ISSN 2076-9202

Fig -IX Channels Preferred by Survey Respondents for Investing in Mutual Funds



Source: Survey

Regulatory Framework

The Indian mutual fund industry in terms of regulatory framework is believed to match up to the most developed markets globally. The regulator, Securities and Exchange Board of India (SEBI), has consistently introduced several regulatory measures and amendments aimed at protecting the interests of the small investor that augurs well for the long term growth of the industry.

The implementation of Prevention of Money Laundering (PMLA) Rules, the latest guidelines issued in December 2008, as part of the risk management practices and procedures is expected to gain further momentum. The success of the relatively nascent mutual fund industry in India, in its March forward, will be contingent on

further evolving a robust regulatory And compliance framework that in supporting the growth needs of the Industry ensures that only the fittest and the most prudent players survive.

Challenges and Issues

While the Indian mutual fund industry has grown at an impressive rate in the last few years, the recent developments of the past few months triggered by the global financial crisis have impacted the fortunes of the Industry resulting in AUM decline, adversely impacting the revenue and profitability. There is a thrust to identify and highlight some of the key issues and challenges being faced by the industry participants that are preventing the industry from harnessing its true growth potential.

(1) Low Levels of Customer Awareness

Low customer awareness levels and financial literacy pose the biggest Challenge to channelising household savings into mutual funds. IIMS Dataworks data released in 2007 establishes that low awareness levels Among retail investors has a direct bearing on the low mutual fund off take in the retail segment. A large majority of retail Investors lack in understanding of risk-return, asset allocation and Portfolio diversification concepts. Low awareness in India has resulted in a majority of the customers investing in lump sum manner.

(2) Limited Focus on Increasing Retail Penetration

ISSN 2076-9202

The Indian mutual fund industry had limited focus on building retail AUM and has only recently stepped up efforts to augment branch presence in Tier 2 and Tier 3 towns. Players have historically garnered AUM by targeting the institutional segment that comprises 63 percent AUM share As at March 2008. Building retail AUM Requires significant distribution capability and a wide footprint to be able to penetrate into Tier 2 and Tier 3 towns, which AMCs have recently started focusing on institutional AUM.

(3) Limited Focus beyond the Top 20 Cities

The mutual fund industry has continues to have limited penetration beyond the top20 cities. Cities beyond Top20 only comprise approximately 10 percent of the industry AUM as per industry practitioners. The retail population residing in Tier 2 and Tier 3 towns, even if aware and willing, are unable to invest in mutual funds owing to limited access to suitable distribution channels and investor servicing. The distribution network of most mutual fund houses is largely focused On the Top 20 cities given the high cost associated with deeper penetration into Tier 2 and Tier 3 towns. However, some of the mutual fund houses have begun focusing on cities beyond theTop20 by building their branch presence and strengthening distribution reach through non-branch channels.

ISSN 2076-9202

(4) Limited Innovation in Product Offerings

The Indian mutual fund industry has largely been product-led and not sufficiently customer focused. The popularity of NFOs triggered a proliferation of schemes with a large number of non-differentiated products. The industry has had a limited focus on innovation and new product development, thereby catering to the limited needs of the customer. Products that cater specifically to customer life stage needs such as education, marriage, and housing are yet to find their way in the Indian_market. The Indian mutual fund industry offers limited investment options viz. Capital guarantee products for the Indian investors, a large majority of whom are risk averse. The Indian market is still to witness the launch of green funds, socially responsible investments, fund of hedge funds, enhanced money market funds, renewable and energy/ climate change funds.

(5) Limited Flexibility in Fees and Pricing Structures

The fee structure in the Indian mutual fund industry enjoys little flexibility .Unlike developed markets where the level of management fees depend on a variety of factors such as the investment objective of the fund, fund assets, fund performance, the nature and number of services that a fund offers. While the expenses have continuously risen, the management fee levels have remained stagnant. Distributors are compensated for their services through a fixed charge in the form of entry load and additional fees as

ISSN 2076-9202

considered appropriate by the AMC. Regardless of the quality of advice and service provided, the commission payable by the mutual fund customer to the distributors is fixed.

(6) Limited Customer Engagement

Mutual fund distributors have been facing questions on their competence, degree of engagement with customer and the value provided to the customer. In the absence of a framework to regulate distributors, both the distributors and the mutual fund houses have exhibited limited interest in continuously engaging with customers post closure of sale as the commissions and incentives had been largely in the form of upfront fees from product sales (although trail commissions have also been paid in limited instances regardless of the service rendered). As a result of the limited engagement, there have been rising instances of mis-selling to customers.

(7) Limited Focus of the Public Sector Network on Distribution of Mutual Funds

Public sector banks with a large captive customer base, significant reach in semi urban and rural areas, and the potential to build the retail investor base, have so far played a very limited role in mutual funds distribution. The India Post network operating the largest postal network in the world Majority of which is in rural areas, is stated to have 250 post offices selling mutual funds of five AMCs only;

further most of the post offices

selling mutual funds are located in Tier 1 and Tier 2 cities which are already been catered to,by national level and other distributors24. Further the credibility enjoyed by the Nationalised Banks, Regional Rural Banks and Cooperative Banks in the rural hinterland has not been fully Leveraged to target the retail segment.

Conclusion

The **Future of Mutual Funds** In India suggests that the industry has got huge scopes of development in the times to come. The Future of Mutual Funds In India is quite bright. Mutual Funds are one of the most popular forms of investments as these funds are diversification, professional management, and liquidity.

Important aspects related to the future of mutual funds in India are -

- The growth rate was 100 % in 6 previous years.
- The saving rate in India is 23 %.

ISSN 2076-9202

- There is a huge scope in the future for the expansion of the mutual funds industry.
- A number of foreign based assets management companies are venturing into Indian markets.
- The Securities Exchange Board of India has allowed the introduction of commodity mutual funds.
- The emphasis is being given on the effective corporate governance of Mutual Funds.
- The Mutual funds in India has the scope of penetrating into the rural and semi urban areas.
- Financial planners are introduced into the market, which would provide the people with better financial planning.

References

Text Books

ISSN 2076-9202

a) Barua,S.K., V. Raghunathan, ans J.R. Varma, Portfolio Management, Tata McGraw-Hill,1992.

b) Investment Management by V.K.Bhalla

c) Investment Analysis and Portfolio Management**,** Tata McGraw-Hill**,** Chandra, Prasanna 2nd Edition

d) Security analysis & Portfolio management by Prasanna Chandra

Magazines and Journals

a) Applied Finance

b) Indian Journal of Finance

c) ICFAI Reader

IDBI Bank

IDBI fund Reckoner

Websites

a) www.mutualfundsindia.com

b) www.idbibank.com

WORKPLACE STRESS PROGNOSTICS: A REVIEW OF BACKGROUND AS WELL AS COST

Amer Rajput [a*], Abu Bakar Abdul Hamid [b]

[a] Assistant Professor, COMSATS Institute of Information Technology, **Pakistan**
PhD Student, Department of Management, Faculty of Management and Human Resource Development, Universiti Teknologi Malaysia, 81310 UTM Skudai, Johor, **Malaysia**
&
[b] Associate Professor, Department of Management, Faculty of Management and Human Resource Development, Universiti Teknologi Malaysia, 81310 UTM Skudai, Johor, **Malaysia**

ABSTRACT

Workplace stress is a problem faced by employees and the firms across the globe since the inception of organization. Stress management interventions have become a major concern for the organizations to cope up with the workplace stress. The prime objective of this article is to patronize the workplace stress in context of definition, antecedents, and outcomes from the academic literature. This article has identified and surveyed 74 articles related to workplace stress. The literature showed that there was disagreement for the construct of stress. Mostly research efforts were made for the outcomes of stress in the developed economies; very little research has been conducted for the developing economies to cope up the stress. Furthermore, antecedents of workplace stress need to be researched more to compensate the research gap.

Keywords: workplace, stress, burnout, organization, performance

1. INTRODUCTION

A considerable amount of literature has been published on workplace stress in pertinent literature contextualizing organizational behavioral. Workplace stress situates at working places and it is diagnosticated as a source of employees' distress along with loss of business with financial impact (Nash, 2010). In recent years there has been an increasing amount of literature on workplace stress; prevalence of occupational stress in organizations engenders productivity losses. Occupational stress is the major sole factor that can influence employees to have turnover intention (Coffey, Dugdill, & Tattersall, 2009); therefore, organizations are seriously intervening for stress management. Stress is a problem of every organization around the globe (Burke, 2010; Idris, Dollard, & Winefield, 2010; Tourigny, Baba, & Wang, 2010) as well as for every individual in each organization (Markiewicz, 2008).

Therefore, workplace stress is a growing concern of employers and their employees (Fevre & Kolt, 2010). World class organizations are implanting special programs to cope up with the stress at workplace(Payne, 2009) as well as to reduce stress (Richardson, Yang, Vandenberg, DeJoy, & Wilson, 2008). However, most of the research for workplace stress is conducted in developed economies such as Australia, France, Sweden, Germany, UK, and USA (Bhagat et al., 2010). This paper is an endeavor to illustrate stress by revisiting contemporary literature for its explanation, root causes, and outcomes in perspective of an organization.

2. DEFINITION OF STRESS

Stress corresponds to a dilemma that insinuates an individual to aberrate from equanimity state with psycho physiological response (Panari, Guglielmi, Simbula, & Depolo, 2010; Weiss, 1983). The generalisability of much published research on the definition of stress is problematic and it lacks the consensus of scholars. There is a difficulty to depict one established definition of stress. The nature of stress

encompassed its sources and effects of its process; moreover, it was considered as the most inexact word in academic literature (Williams, 1994). Lack of consensus is existing about the definition and measurement of stress; furthermore, exiguity of agreement about environmental factors (Marmot & Madge, 1997).

Research on basic nature of stress predominantly existed in literature during past two decades such as: stress; environmental characteristics; and a state felt by an employee (Schuler & Jackson, 1986). Lazarus (1974) described stress, "any demands which tax the system, whatever it is, a physiological system, a social system or a psychological system, and the response of that system". Stress deals to wide-ranging fields of enquiry; however, some assumed that stress was no longer useful as a scientific construct (Schuler & Jackson, 1986). Stress in not a bad event; any normal activity can fabricate considerable stress without causing any detrimental effects (Selye, 1974, 1982). Weiman (1977) suggested: "Occupational stress is the sum total of factors experienced in relation to work which affect the psychosocial and physiological homeostasis of the worker. The individual factor is termed a stressor and stress is the individual worker's reaction to stressors".

Cummings and Cooper (1979) described that stress was a psychological or physical factor that was to create a threat for an individual. The definition of stress is debated often in pertinent literature. It is an unlikable condition emotional as well as physiological situation ensuing as of disagreeable employment practices, predominantly practices with the purpose of doubtful and exterior the employee's power (T A Beehr & Bhagat, 1985; Hart & Cooper, 2001). Robbins (2001) described stress as a changing situation when an employee is affronted with favorable circumstances, constraints, and impetration to what the employee expects outcomes as highly important with uncertainty.

ISSN 2076-9202

3. ANTECEDENTS OF STRESS

Individual, organizational, and environmental factors possibly cultivate stress (Cook & Hunsaker, 2001; Matteson & Ivancevich, 1999); moreover, these variables are documented as stressors of organization (Von Onciul, 1996). Stressors are work experiences due to which stress is generated; however, strain is effect of stress (Hart & Cooper, 2001; Kahn & Byosiere, 1992). Environmental stress encompasses factors such as: psychological factors; dissimilar situations; unexpected success; humiliation; fear; and emotional arousal (Ganster & Schaubroeck, 1991); therefore, it is not possible to pick only one factor as cause of stress (Selye, 1982). Sutherland and Cooper's (1988) summarized these factors (see Table 1).

Table 1 Causes of stress

Causes	**Illustration**
Intrinsic job factors	Physical demands such as: noise, vibration, temperature variation, humidity, ventilation, lighting, hygiene, and climate
Task factors	Shift/night work, workload, long hours, new technology, repetitiveness, monotony, experience of risk, and hazards
Individual's in organization	Role conflict, role ambiguity, and responsibility
Interpersonal and relational demands	With supervisors, colleagues and/or subordinates

Career	Job insecurity, status incongruity, and under/over promotion
Organizational structure	Participation in decision-making.

Adapted from Sutherland and Cooper (1988)

A high level of stress is possibly prevalent when organizational environment is unpleasant, no privacy, hassle to perform job, and distractions (Eugene, 1999; Miller, Ellis, Zook, & Lyles, 1990). When an individual has to perform several roles; it can lead to stress. Role conflicts make up expectations that are possibly difficult to resolve; however, job stress is positively related to role conflict (Roberts, Lapidus, & Chonko, 1997). Foot and Venne (1990) documented that career development barriers were positively related to job stress; moreover, strong evidences were found that isolation produced stress because employees with high social needs were facing more stress (Eugene, 1999; Kanungo, 1981; Mirowsky & Ross, 1986; Thoits, 1995). Numerous studies have attempted to describe the potential impact of personality traits on job stress (Deary, Blenkin, Agius, & Endler, 1996; Goldberg, 1993). Five personality dimensions are documented in pertinent literature: neuroticism, extraversion, openness, agreeableness, and conscientiousness (Costa & McCrae, 1985; McCrae & Costa, 1991; McCrae & John, 1992).

Empirically it was proved that work overload (quantitatively and qualitatively) was linked to physiological, psychological, and behavioral stress (Terry A. Beehr & Newman, 1978; Roberts, et al., 1997); intense workload decreased employees' psychological health that resulted in stress (Greenhaus, Bedeian, & Mossholder, 1987).

Sauter, Murphy and Hurrell (1992) documented, "Poor relations with colleagues,

supervisors and subordinates at work have been identified as important risk factors for stress-related problems". Cox and Griffiths (1995) identified those individuals who were relatively isolated and with slight support from colleagues, supervisors, friends, and family were more stressed. Taylor (1992) documented that too much work and pressure to perform were the major stressors; moreover, when changes are taking place in an organization then stress level would be high in that organization (Coffey, et al., 2009). Highly competitive work climate as well leads to stress (Arnold, Flaherty, Voss, & Mowen, 2009). Now a day's recession is another external factor that is leading towards the higher level of stress for employees and employers across the globe (Mujtaba, Lara, King, Johnson, & Mahanna, 2010; Paton, 2010).

4. EFFECTS OF STRESS

While a variety of definitions of the term job stress have been suggested, this paper will use the definition suggested by Parker and DeCotiis (1983), "stress is an uncomfortable and undesirable feeling experienced by an individual who is required to deviate from normal or self-desired functioning in the work place as the result of opportunities, constraints, or demands relating to potentially important work- related outcomes". Job stress possibly leads to individual's illness and unhealthiness (Hayashi, Selia, & McDonnell, 2009; Kelloway, 2011; Kram & Hall, 1989; Moustaka & Constantinidis, 2010); decreased performance (Jamal, 1990; Motowidlo, Packard, & Manning, 1986; Moustaka & Constantinidis, 2010); decreased effectiveness (Terry A. Beehr & Newman, 1978; Motowidlo, et al., 1986); and ultimately resulting in increased costs for the firm (Manning, Jackson, & Fusilier, 1996).

Job stress can have positive or negative effect on performance (Gardner & Fletcher, 2009); there is consensus that too much stress effects performance negatively (Buck, 1972; Hall & Lawler, 1970; Sheridan & Vredenburgh, 1979).

Workplace stress affects turnover of employees; productivity; and performance of a firm (Ongori & Agolla, 2008). However, some researchers reported job stressors as related to turnover intention (Dunham, 1976; Gupta & Beehr, 1979). Baumeister (2001) reported that behaviors of over-eating and lack of exercise reflected difficulties in self-control resulting in depletion of stress. Stress is a state and it is not a disease; nevertheless, it leads towards illness. Excessive stress leads to health problems (Teasdale & McKeown, 1994).

Tom Cox, Griffiths, and Leka (2008) documented that the experience of stress did not necessarily had pathological development. Moreover, asserted it possibly affect health; however, an unhealthy employee with stress would sensitize individuals to other sources of stress by reducing their ability to cope. Therefore, a relationship between the experience of stress and poor health appeared justified.

Burnout is a widely cited outcome of chronic stress; it is chronic affective response that results in loss of feeling for accomplishment (Salami, 2011; Yu, Lin, & Hsu, 2009). However, Sonnentag and Frese (2003) associated burnout with stressors and argued the relationship between the variables; the insinuations for employers of stressful workplaces possibly be economic and humanitarian. Karasek and Theorell (1990) argued that exhausted and depressed employees were not energetic, innovative, and accurate; therefore, these losses may consequence for larger than health care as avoidable costs. Moreover, Ganster and Schaubroeck (1991) concluded that strong indirect evidence existed for stress to cause illness. Stress is a leading cause for absenteeism, turnover, and reduced performance (Jamal, 1984; Macy & Mirvis, 1976). DeFrank and Ivancevich (1998) emphasized when a firm ignored the impact of stress on the employees then the firm's productivity was decreased.

5. CONCLUSION

Irrefutably, there is consensus that too much workplace stress is negatively related to firm performance. Chronic stress leads to malingering, health problems, turnover intention, and burnout resulting in decreased productivity and financial losses. Not only internal factors can lead to workplace stress but external factors can also cause workplace stress. The factors that produce stress can specific environment factors such as individual and organizational. Moreover, general environmental factors such as recession of world economy can lead to workplace stress for the employees and for employers as well. We suggest that future research is needed to investigate strategies for coping up stress at workplaces as well as for remedies to control the antecedents of workplace stress.

REFERENCES

Arnold, T., Flaherty, K. E., Voss, K. E., & Mowen, J. C. (2009). Role stressors and retail performance: The role of perceived competitive climate. *Journal of Retailing, 85*(2), 194-205.

Baumeister, R. F. (2001). *An energy model of the self in personality*. Washington, DC: American Psychological Association.

Beehr, T. A., & Bhagat, R. S. (1985). *Human stress and cognition in organizations: An integrated perspective*. New York: Wiley.

Beehr, T. A., & Newman, J. E. (1978). Job stress, employee health, and organizational effectiveness: A facet analysis, model, and literature review. *Personnel Psychology, 31*(4), 665-699.

Bhagat, R. S., Krishnan, B., Nelson, T. A., Leonard, K. M., Jr, D. L. F., & Billing, T. K. (2010). Organizational stress, psychological strain, and work outcomes in six national contexts. *Cross Cultural Management, 17*(1), 10-29.

Buck, V. E. (1972). *Working under pressure*. London: Staples Press.

Burke, R. J. (2010). Workplace stress and well-being across cultures: research and practice. *Cross Cultural Management, 17*(1), 5-9.

Coffey, M., Dugdill, L., & Tattersall, A. (2009). Designing a stress management intervention in social services. *International Journal of Workplace Health Management, 2*(2), 98-114.

Cook, C. W., & Hunsaker, P. L. (2001). *Management and organisational behavior* (3 ed.). New York: McGraw Hill.

Costa, P. T., & McCrae, R. R. (1985). *The NEO personality inventory manual* Odessa, FL: Psychological Assessment Resources, Inc.

Cox, T., & Griffiths, A. (1995). *The nature and measurement of work stress: theory and practice*. London: Taylor and Francis.

Cox, T., Griffiths, A., & Leka, S. (2008). Work Organization and Work-Related Stress *Occupational Hygiene* (pp. 421-432): Blackwell Publishing Ltd.

Cummings, T. G., & Cooper, C. L. (1979). A cybernetic framework for studying occupational stress. *Human Relations, 32*(5), 395-419.

Deary, I. J., Blenkin, H., Agius, R. M., & Endler, N. S. (1996). Models of job-related stress and personal achievement among consultant doctors. *British Journal of Psychology, 87*, 3-29.

DeFrank, R. S., & Ivancevich, J. M. (1998). Stress on the Job: An Executive Update. *The Academy of Management Executive (1993-2005), 12*(3), 55-66.

Dunham, R. B. (1976). The measurement and dimensionality of job-characteristics. *Journal of Applied Psychology, 61*(4), 404-409.

Eugene, W. J. (1999). The impact of work resources on job stress among correctional treatment staff. *Journal of Addictions & Offender Counseling, 20*(1), 26-34

Fevre, M. L., & Kolt, G. S. (2010). Occupational stress: Are we all talking about the

same thing? *New Zealand Journal of Employment Relations, 35*(2), 16-27.

Foot, D. K., & Venne, R. A. (1990). Population, pyramids and promotional prospects. *Canadian Public Policy, 16*(4), 387-398.

Ganster, D. C., & Schaubroeck, J. (1991). Work stress and employee health. *Journal of Management, 17*(2), 235-271.

Gardner, D., & Fletcher, R. (2009). Demands, appraisal, coping and outcomes: Positive and negative aspects of occupational stress in veterinarians. *International Journal of Organizational Analysis, 17*(4), 268-284.

Goldberg, L. R. (1993). The structure of phenotypic personality traits. *The American Psychologist, 48*(1), 26-34.

Greenhaus, J. H., Bedeian, A. G., & Mossholder, K. W. (1987). Work experiences, job performance, and feelings of personal and family well-being. *Journal of Vocational Behavior, 31*(2), 200-215.

Gupta, N., & Beehr, T. A. (1979). Job stress and employee behaviors. *Organizational Behavior and Human Performance, 23*(3), 373-387.

Hall, D. T., & Lawler, E. E. (1970). Job Characteristics and Pressures and the Organizational Integration of Professionals. *Administrative Science Quarterly, 15*(3), 271-281.

Hart, P. M., & Cooper, C. L. (2001). *Occupational stress: Toward a more integrated framework* (2 ed.). Thousand Oaks CA: Sage.

Hayashi, A. S., Selia, E., & McDonnell, K. (2009). Stress and provider retention in underserved communities. *Journal of Health Care for the Poor and Underserved, 20*(3), 597-604.

Idris, M. A., Dollard, M. F., & Winefield, A. H. (2010). Lay theory explanations of occupational stress: the Malaysian context. *Cross Cultural Management, 17*(2), 135-153.

Jamal, M. (1984). Job stress and job performance controversy: An empirical assessment. *Organizational Behavior and Human Performance, 33*(1), 1-21.

Jamal, M. (1990). Relationship of job stress and type-A behavior to employees' job satisfaction, organizational commitment, psychosomatic health problems, and turnover motivation. *Human Relations, 43*(8), 727-738.

Kahn, R. L., & Byosiere, P. (1992). *Stress in organizations* (Vol. 3). Palo Alto, CA: Consulting Psychologists Press.

Kanungo, R. N. (1981). Work alienation and involvement: problems and prospects. *Applied Psychology, 30*(1), 1-15.

Karasek, R., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic Books.

Kelloway, E. K. (2011). Occupational health psychology. *Canadian Psychology, 52*(2), 146-147.

Kram, K. E., & Hall, D. T. (1989). Mentoring as an antidote to stress during corporate trauma. *Human Resource Management, 28*(4), 493-510.

Lazarus, R. S. (1974). Psychological stress and coping in adaptation and Illness. *The International Journal of Psychiatry in Medicine 5*(4), 321-333

Macy, B. A., & Mirvis, P. H. (1976). A Methodology for Assessment of Quality of Work Life and Organizational Effectiveness in Behavioral-Economic Terms. *Administrative Science Quarterly, 21*(2), 212-226.

Manning, M. R., Jackson, C. N., & Fusilier, M. R. (1996). Occupational stress, social support, and the costs of health care. *Academy of Management Journal, 39*(3), 738-750.

Markiewicz, D. (2008). No one is bullet-proof from stress. *ISHN, 42*(12), 22.

Marmot, M. G., & Madge, N. (1997). *An epidemiological perspective on stress and health*. NY: John Wiley and Sons.

Matteson, M. T., & Ivancevich, J. M. (1999). *Organizational behavior and management* (5 ed.). New York: McGraw Hill.

McCrae, R. R., & Costa, P. T., Jr. (1991). Adding Liebe und Arbeit: The Full Five-Factor Model and Well-Being. *Personality and Social Psychology Bulletin, 17*(2), 227-232.

McCrae, R. R., & John, O. P. (1992). An Introduction to the Five-Factor Model and Its Applications. *Journal of Personality, 60*(2), 175.

Miller, K. I., Ellis, B. H., Zook, E. G., & Lyles, J. S. (1990). An integrated model of communication, stress, and burnout in the workplace. *Communication Research, 17*(3), 300.

Mirowsky, J., & Ross, C. E. (1986). Social pattern of distress. *Annual Review of Sociology, 12*, 23-45.

Motowidlo, S. J., Packard, J. S., & Manning, M. R. (1986). Occupational stress: Its causes and consequences for job performance. *Journal of Applied Psychology, 71*(4), 618-629.

Moustaka, E., & Constantinidis, T. C. (2010). Sources and effects of work-related stress in nursing. *Health Science Journal, 4*(4), 210-216.

Mujtaba, B. G., Lara, A., King, C., Johnson, V., & Mahanna, T. (2010). Stress at work in a slowing economy. *Journal of Applied Management and Entrepreneurship, 15*(2), 26-42.

Nash, J. (2010). Taking the stress out of work. *Risk Management, 57*(1), 42-47.

Ongori, H., & Agolla, J. E. (2008). Occupational stress in organizations and its effects on organizational performance. *Journal of Management Research, 8*(3), 123-135.

Panari, C., Guglielmi, D., Simbula, S., & Depolo, M. (2010). Can an opportunity to learn at work reduce stress? *Journal of Workplace Learning, 22*(3), 166-179.

Parker, D. F., & DeCotiis, T. A. (1983). Organizational determinants of job stress. *Organizational Behavior and Human Performance, 32*(2), 160-177.

Paton, N. (2010). Recession leads to higher levels of stress and long-term absence. *Occupational Health, 62*(3), 7.

Payne, W. (2009). New approaches to promoting resilience at work. *Occupational Health, 61*(11), 31.

Richardson, H. A., Yang, J., Vandenberg, R. J., DeJoy, D. M., & Wilson, M. G. (2008). Perceived organizational support's role in stressor-strain relationships. *Journal of Managerial Psychology, 23*(7), 789-810.

Robbins, S. P. (2001). *Organizational behavior* (9 ed.). New Jersey: Prentice-Hall.

Roberts, J. A., Lapidus, R. S., & Chonko, L. B. (1997). Salespeople and stress: The moderating role of locus of control on work stressors and felt stress. *Journal of Marketing Theory and Practice, 5*(3), 93-108.

Salami, S. O. (2011). Job stress and burnout among lecturers: Personality and social support as moderators. *Asian Social Science, 7*(5), 110-121.

Sauter, S. L., Murphy, L. R., & Hurrell, J. J. (1992). *Prevention of work-related psychological disorders: a national strategy proposed by NIOSH*. Washington DC: American Psychological Association.

Schuler, R. S., & Jackson, S. E. (1986). Managing stress through PHRM practices: An uncertainty interpretation. *Research in Personnel and Human Resources Management, 4*, 183-224.

Selye, H. (1974). *Stress without distress*. New York: Lippincott.

Selye, H. (1982). *History and present status of the stress concept*. New York: Free Press.

Sheridan, J. E., & Vredenburgh, D. J. (1979). Structural model of leadership influence in a hospital organization. *Academy of Management Journal, 22*(1), 6-21.

ISSN 2076-9202

Sonnentag, S., & Frese, M. (2003). Stress in Organizations *Handbook of Psychology*: John Wiley & Sons, Inc.

Sutherland, V., & Cooper, C. (1988). *Sources of Work Stress*. London: Taylor and Francis.

Taylor, R. (1992). *Case Studies In Stress*. London: HMSO.

Teasdale, E. L., & McKeown, S. (1994). *Managing stress at work: The ICI-Zeneca pharmaceuticals experience 1986-1993*. Chichester: John Wiley.

Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What next? *Journal of Health and Social Behavior, 36*, 53-79.

Tourigny, L., Baba, V. V., & Wang, X. (2010). Stress episode in aviation: the case of China. *Cross Cultural Management, 17*(1), 62-78.

Von Onciul, J. (1996). Stress at Work. *British Medical Journal, 313*(1), 745-748.

Weiman, C. G. (1977). A Study of Occupational Stressor and the Incidence of Disease/Risk. *Journal of Occupational and Environmental Medicine, 19*(2), 119-122.

Weiss, M. (1983). Effects of Work Stress and Social Support on Information Systems Managers. *MIS Quarterly, 7*(1), 29-43.

Williams, S. (1994). *Managing pressure for peak performance*. London: Kogan Page.

Yu, M.-C., Lin, C.-C., & Hsu, S.-Y. (2009). Stressors and burnout: The role of employee assistance propgrams and self-efficacy. *Social Behavior and Personality, 37*(3), 365-377.

International Migrant remittances and reduction of poverty

Dr.P.MALYADRI, Mcom,PhD,PGDCA
PRINCIPAL
Director, UGC Major Research Project
Government Degree College
Osmania University
TANDUR-500044, Ranga Reddy {Dist}AP,India
Email id:drpm16@yahoo.co.in

ABSTRACT

International migration should become an integral part of national, regional and global strategies for economic growth, in both the developing and developed world.The number of international migrants, or people residing in a country other than their country of birth, has increased more or less linearly over the past 40 years. International migration has attracted a great deal of policy attention in recent years, Moreover, for many developing countries, remittances have become a critical form of financing their balance of payments. While remittances are generally pro-poor, their effects are greatest on transient poverty. However, the long-term effects on structural poverty are less clear, principally because the consequences of remittances on long- term economic development are not well understood. The role that migrants play in promoting development and poverty reduction in countries of origin, as well as the contribution they make towards the prosperity of destination countries, should be recognized and reinforced. The paper aims to analyze the capability of international migration to reach the poor and increase their income levels and also suggest measures for Inclusive Development.

KEY WORDS: Remittance, Emigration , Inclusive Development , Diaspora

Introduction

The international migration of labor is a vital component of globalization and economic development in many less developed countries (LDCs) . Remittances have emerged as an important source of external development finance in recent years. The number of international migrants, or people residing in a country other than their country of birth, has increased more or less linearly over the past 40 years. International migration has attracted a great deal of policy attention in recent years, While remittances are generally pro-poor, their effects are greatest on transient poverty. However, the long-term effects on structural poverty are less clear, principally because the consequences of remittances on long- term economic development are not well understood. Moreover, for many developing countries, remittances have become a critical form of financing their balance of payments. The role that migrants play in promoting development and poverty reduction in countries of origin, as well as the contribution they make towards the prosperity of destination countries, should be recognized and reinforced. International migration should become an integral part of national, regional and global strategies for economic growth, in both the developing and developed world.

In considering the consequences of alternative migration regimes for development, it is important to recognize that improvements in average incomes within the countries of origin by no means guarantee betterment for all. In the midst of overall economic development, pockets of poverty may well be left behind; indeed poverty may even be deepened for some. For the most part,

ISSN 2076-9202

the evidence suggests that economic growth dominates, resulting in few cases of rising poverty incidence. Nonetheless the issues remain as to the effects of migration upon inequality, whether some groups are left behind in any gains from migration, and indeed whether some are made absolutely worse off. **The paper aims to analyze the capability of international migration to reach the poor and increase their income levels and also suggest measures for Inclusive Development. Further it also focuses the remittance issues relating to India.**

Global trends

There are **214 million estimated international migrants** in the world today. Migrants comprise **3.1 per cent of the global population.** The number of the migrants worldwide would constitute the fifth most populous country in the world. Women account for 49 per cent of global migrants[1]. In 2008, **remittance flows are estimated at USD 444 billion worldwide**, USD 338 billion of which went to developing countries. There are roughly **20 to 30 million unauthorized migrants worldwide**, comprising around 10 to 15 per cent of the world's immigrant stock. In 2008, there were **26 million internally displaced persons (IDPs)** in at least 52 countries as a result of conflict .In 2008, the **global number of refugees reached an estimated 15.2 million persons**. Today there are **16 million refugees** worldwide. Migration flows have shifted in recent years with changing poles of attraction for labour migration . In some parts of the world, migrant stock has actually decreased.

ISSN 2076-9202

- Although the number of Asian migrants has increased from 28.1 million in 1970 to 43.8 million in 2000, Asia's share of global migrant stock decreased from 34.5 per cent to 25 per cent over the same period.
- Africa has also seen a decline in its share of international migrants: from 12 per cent in 1970 to 9 per cent in 2000.
- This is also true for Latin America and the Caribbean (down from 7.1 per cent to 3.4 per cent); Europe (down from 22.9 per cent to 18.7 per cent) and for Oceania (3.7 per cent to 3.3 per cent).
- Only Northern America and the former USSR have seen a sharp increase in their migrant stock between 1970 and 2000 (from 15.9 per cent to 23.3 per cent for Northern America and 3.8 per cent to 16.8 per cent for the Former USSR). In the latter case however, this increase has more to do with the redefinition of borders than with the actual movement of people.
- The stock of international migrants remains concentrated in relatively few countries.
- 75 per cent of all international migrants are in 12 per cent of all countries

Research on Migration

Today, the share of females in the world's international migrant population is close to one half, but there are differences among sending and receiving countries. The share of females in migration to some countries is higher than that of males. The share to other countries is lower for females. Some countries of emigration send more females than males abroad, and others do the opposite. What explains these differences in international migration between

ISSN 2076-9202

the genders is just now becoming a focus of international migration research.

Researchers used to ask whether migration has a positive or negative effect on development. Today they are more likely to ask: "Why does international migration seem to promote economic development in some cases and not in others?" and "Can policies be designed to influence migration's impacts in migrant-sending economies?" Negative effects of international migration on developing countries have received considerable attention in both academic research and the press. These include the cost to LDCs of losing labor and human capital to foreign labor markets, especially the "brain drain."

Less attention has been given to the positive effects of international migration. Increasingly the conclusion of academic research is that, although the negative effects of international migration cannot be ignored, they need to be balanced with the positive effects. These include remittance income and the economic multipliers that it produces; the influences of migration and remittances on investments, which appear to increase productivity in agricultural and nonagricultural activities; poverty alleviation; and migration-induced incentives to invest in schooling and health. In the past, research on the impacts of international migration and remittances focused on the households and regions that sent migrants and received remittances, and it considered only the direct effects of migration and remittances in these households and regions. New research is uncovering many indirect ways in which migration and remittances influence incomes and production, both in the households that send migrants and in those that do not. The impacts of international migration appear to be greater and considerably more complex

ISSN 2076-9202

than simple remittance numbers suggest. The newly uncovered links between international migration and development potentially open the way for a variety of new policy interventions to increase migration's contribution to inclusive development.

Globalisation shapes migration

People have always moved but the current phase of globalisation – the growing economic and social interdependence of countries worldwide – is creating new and powerful drivers for people to move.

- People are now, as never before, aware of opportunities elsewhere and the falling cost of travel makes it easier to get there. Globalisation has stimulated international trade and competition and put a premium on mobile, especially skilled populations.This in turn stimulates the flow and exchange of new ideas and financial resources across borders, raising and sharing prosperity.

Globalisation is also shaping migration within individual countries.

- As companies search the globe for the cheapest, most efficient workers to manufacture their products, new areas of economic growth and opportunities arise. Economic activities are greatest and most likely to produce long-term growth in certain locations such as towns, cities, ports and areas of high agricultural potential. Internal labour migration is often a response to the growth and employment opportunities in these areas.

ISSN 2076-9202

Despite the limited availability of data for developing countries we know that poor people often choose to migrate as a way of improving their lives.

- The differences in demand for labour, and economic inequality between local areas, countries and regions mean that poor men and women often move elsewhere to take advantage of job opportunities and better wages.The inclusion of poor men and women in global and internal labour markets can make a significant contribution to reducing poverty. For many poor families in the poorest countries, the migration of one or more members is an important way of earning a living. For example, one recent study found 50-80% of rural African households had at least one migrant member18 working in another part of the country in which they lived.

The link between migration and poverty is complex and dependent on the specific circumstances in which migration takes place.

- Migration can both cause and be caused by poverty. Poverty can be alleviated as well as exacerbated by migration. In Kerala, India, for example, migration to the Gulf States has caused wages to rise, reduced unemployment, and improved the economic situation of those left behind. In other situations, migration does not lead to economic or social improvement. Research on the impact of labour migration in tribal Western India found that for poorer migrants many years of migration have not led to any long-term increase in assets or any reduction in poverty'. However the study also noted that migration offered poor

ISSN 2076-9202

migrants 'a short-term means to service debt and avoid the more extreme forms of dependency and bondage',

- **migration can increase or decrease inequality** but on balance migration does not lead to higher inequality. It is often the better-off members of a community who first migrate as they have the resources to support migration. This first phase of migration, including remittances, can reinforce existing inequalities – but over time, with the spread of information beyond the original migrants' families and the build-up of social networks, lower-income individuals get the opportunity to migrate. As migration becomes widespread, the receipt of remittances, skills gained, and opening up of new opportunities begins to benefit poorer households.

Migration can benefit poor people and developing countries.

- For individuals and their families, migration can increase income, lead to new skills, improve social status, build assets and improve quality of life. For communities and developing countries, emigration can relieve labour market and political pressures, result in increased trade and direct investment from abroad, lead to positive diaspora activity such as remittances, promote social and political change and lead to the inclusive development

Migration and Underdevelopment: Chicken or Egg?

There is little doubt that the loss of human resources to international migration can have negative effects on economic development in

migrant-sending areas. If, as is likely to be the case, international migrants come from relatively labor-abundant areas, then sacrificing these individuals to foreign labor markets may not have a very large impact on production at the origin. However, if individuals who migrate abroad more skilled and highly educated than those who stay behind, and if this "human capital" contributes to productivity in rural areas, then international migration could reduce production and make those who stay behind less productive than they were before.

A big problem that researchers have in trying to test whether migration affects development is that underdevelopment also drives emigration. One usually does not see streams of migrants leaving economies that are dynamic centers of employment creation. If migration and underdevelopment seem to go hand in hand, it might be because the loss of people to migration retards development. Or it might be that people migrate away from underdeveloped areas, which have little to offer them if they stay. Naturally, both may be true; the question is which dominates. It is difficult to separate out cause from effect.

Remittance in India

Remittances have emerged as an important source of external development finance for developing countries in recent years The impact of migrant remittances upon household economies in developing countries has become an important research and policy question, since the incomes of a large proportion of households in developing countries are linked with migrants' remittances.

ISSN 2076-9202

India reported remittances of $52 billion in 2008, sharply higher than the earlier estimate of $45 billion, says the most recent World Bank update on migration & remittances. The reason for this unexpected surge are many, including the continued hiring of migrants in the Gulf countries and the falling asset prices, rising interest rate differentials and a depreciation of the local currency, all of which have attracted investments from migrants. There seems to be a switch in the motivation of remittances from consumption to investments. Remittance flows to developing countries are, however, expected to be $304 billion in 2009, down from an estimated $328 billion in 2008. Though the flows have slowed down in many corridors since the last quarter of 2008, the total flows in the year was much larger than the previous estimate of $305 billion. In line with a recent downward revision in the forecast of global economic growth, the World Bank also lowered its forecasts for remittance flows to developing countries and the flows are projected to fall by 7.3% in 2009 from the earlier forecast of a 5% fall. But the remittances will remain relatively more resilient despite the predicted 7.3% decline, when compared to the private flows to developing countries, where the fall is expected to be much steeper contracting at even 50% or more. According to the World Bank, remittances are relatively resilient because, while new migration flows have declined, the number of migrants living overseas has been relatively unaffected by the crisis. However, there are downside risks to the outlook as final flows will depend on the depth and duration of the current crisis, unpredictable movements in exchange rates, and the possibility that immigration controls may be tightened further in major destination countries.

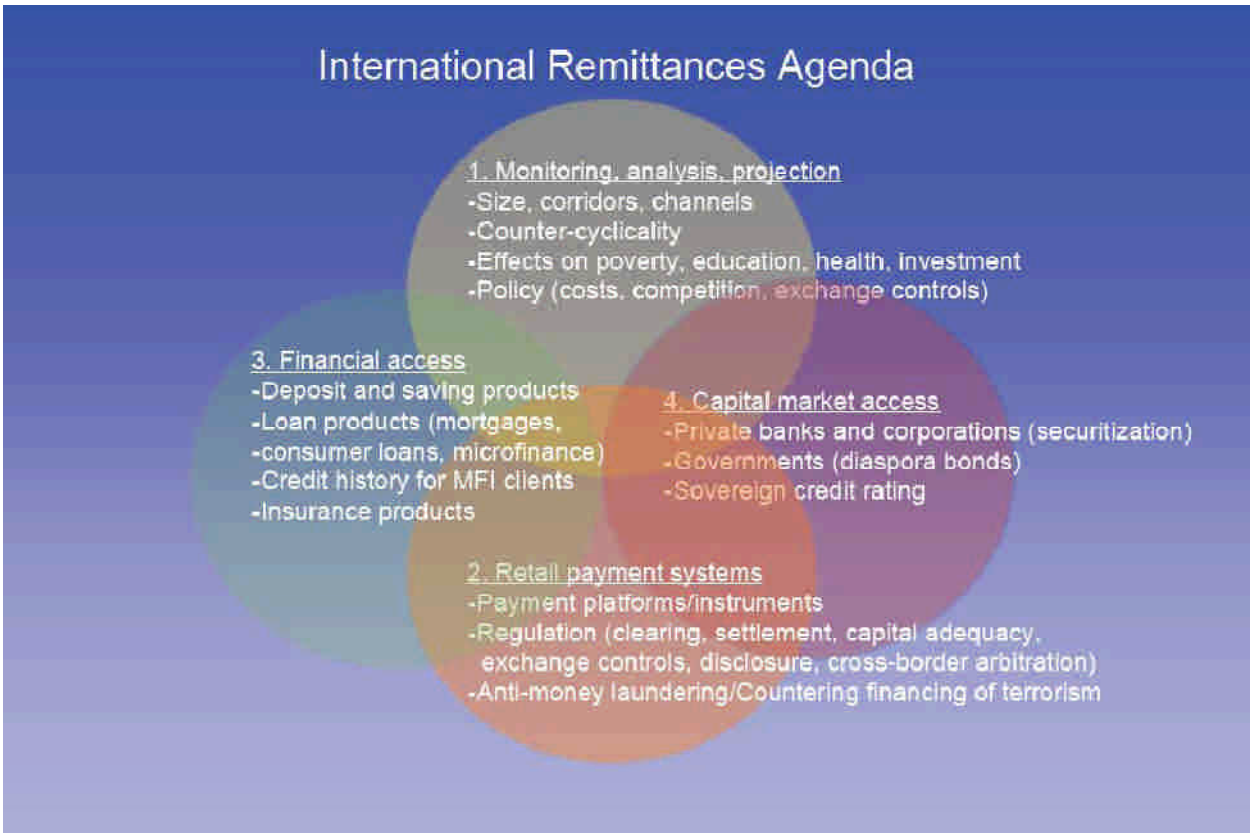
ISSN 2076-9202

The reason for the fall in remittance in 2009 would vary across regions. Remittance flows to Latin America have been falling in large part because of a slowdown in the US construction sector. The new forecasts show a 6.9% decline in remittances for the Latin America and Caribbean region. Sub-Saharan Africa is also likely to experience a 8.3% fall in its remittance flows. However, flows to South Asia and East Asia have been strong; but remittances are expected to decline somewhat in 2009. It show inflows to South Asia will decline by 4%.

International Remittances Agenda

The financial crisis has highlighted the importance of migration and remittances. At over $300 billion a year, remittance flows provide an enormous source of development financing. In the near-term, the resilience of these flows has made them even more important as a source of external financing, offering a ray of home in these difficult times. The development community can further leverage these flows for development by making them cheaper, safer and more productive for both the sending and the receiving countries. An "International Remittances Agenda" as summarized in figure would involve: (1) monitoring, analysis and projections; (2) improving retail payment systems through use of better technologies and appropriate regulatory changes; (3) linking remittances to financial access at the household level; and (4) leveraging remittances for capital market access at the institutional or macro levels.

ISSN 2076-9202



International Remittances Agenda

Top Receivers of Remittances

- The top five recipients of migrant remittances in 2007 were India, China, Mexico, the Philippines, and France :

Countries receiving the most remittances, 2007 (estimates in US$ billion)	
India	27.0
China	25.7
Mexico	25.0
Philippines	17.0
France	12.5

Sources: Development Prospects Group, World Bank

ISSN 2076-9202

Top Senders of Remittances

While South-South migration nearly equals South-North migration, rich countries are still the main source of remittances:

Countries from where most remittances were sent, 2007 (in US$ billion)	
US	42.2
Saudi Arabia	15.6
Switzerland	13.8
Germany	12.3
Russia	11.4

Sources: Development Prospects Group, World Bank

Top Emigration Countries

Countries from where the largest number of migrants originated were Mexico and Russia, India, China, Ukraine (6.1 million) and Bangladesh (4.9 million).

Countries sending the largest number of migrants, 2007 (in millions)	
Mexico	11.5
Russia	11.5
India	10.0
China	7.3
Ukraine	6.1
Bangladesh	4.9

Sources: Development Prospects Group, World Bank

Top Immigration Countries

Countries receiving the largest number of migrants, 2007

ISSN 2076-9202

(in millions)	
US	38.4
Russia	12.1
Germany	10.1
Ukraine	6.8
France	6.5
Saudi Arabia	6.4
Canada	6.1
India	5.7

Sources: Development Prospects Group, World Bank

Relative Importance of Remittances

It is generally assumed that in a large economy like India's, the impact of remittances is negligible. But, compared with some important economic and fiscal indicators, their relative

importance is significant. Today, remittances represent 3.08 percent of the country's GDP — a sharp rise from 0.7 percent in 1990-1991 . In 2005-2006, remittances were higher than the US$23.6 billion in revenues from India's software exports, which is particularly impressive since software exports increased 33 percent that year.

Migrant remittances and reduction of poverty

Remittances can help families to meet their basic needs – buy food, see a doctor or make repairs to their home. In some cases the money received from relatives who have migrated can be enough to provide savings or investment opportunities in small-scale enterprise, to buy land or open a bank account. The value of remittances sent by migrants working away from home but still in their home countries is lower than that of international remittances, but the

ISSN 2076-9202

difference they can make to families should not be underestimated. Cheap, safe banking and investment services can encourage rural migrants to invest in their home community and support rural development through the purchase of land, equipment and labour.

Remittances can help to improve economic growth.

- When remittances are saved or used to make investments they help to stimulate economic growth. Even when remittances are used to buy food or health and education services, they stimulate demand for other goods and services. This is particularly important in countries with high unemployment. Remittances are also a source of foreign exchange for some of the poorest countries and in some small economies represent a large share of gross domestic product (GDP) and of export earnings.

The sending of money by migrants to their families and communities is made difficult and costly by weak financial infrastructure, poor payments systems, a lack of accessible financial institutions, weak accountability and a weak regulatory environment.

- It means migrants frequently turn to informal channels to transfer money. Informal transfer systems are not necessarily 'bad' and, from the point of view of migrants, they can offer an inexpensive and reliable way to send money home when there are no banking or financial services available. However, transparent and accountable ways of transferring money are important to prevent financial crimes and money laundering or the diversion of funds to finance other illegal activities such as terrorism. Preventing these illegal activities is best achieved through

ISSN 2076-9202

regulated formal systems. The challenge is to create a set of rules that are flexible and inclusive enough to cover both informal and formal sector approaches.

- Supporting migrants to use the formal financial sector might include lowering the cost of money transfers, providing them with information about the services available and helping to overcome their concerns about using formal institutions such as the need for identification. It will also be important to take account of the different ways in which men and women remit. Men remit relatively large amounts of funds while women generally send back small amounts (although a larger share of their income) and do so more frequently than male migrants. Women are also the largest receivers of remittances.

In response to the growing value of remittances, some governments have started to encourage these flows.

- They are putting in place new legislation and regulations to make it easier to send money home. But it is important that governments do not damage what is essentially a private transaction between individuals and that there is recognition of the impacts for migrants who send money home. Remittances involve a tradeoff between the needs of the migrant and those of the families to whom they send money. Any attempts to increase the volume and poverty reduction impact of remittances should not place additional burden on migrants who may also be in a vulnerable situation

Diasporas and poverty reduction

ISSN 2076-9202

When people migrate across international borders they (and their families) tend to form communities in their destination areas that can continue to have strong personal and material links with their countries of origin. Referred to as diasporas, these communities have historically been viewed as negative or irrelevant to formal international development efforts. The main concern is the support provided by some diaspora to groups involved in violent conflict in their countries of origin. However, the positive economic, social and political connections that diasporas maintain with their countries of origin have the potential to be an engine for development

- **Many diaspora groups and individuals are playing significant roles in their countries of origin**.Their involvement is extremely varied. It ranges from disaster relief to business development, from exporting machinery to importing ideas, from instigating war to searching out paths to peace. In addition to private remittances, diasporas are active in a range of practices between nations – Foreign Direct Investment (FDI), market development (including outsourcing of production), technology transfer, charitable activities, tourism and political contributions.

- **International development organisations are just beginning to realise the contribution diaspora communities can make to reducing poverty and improving development**. However, many national and international donors and NGOs are structured in a formal manner, and may overlook, be reluctant, or find it very difficult to work

ISSN 2076-9202

with the often less formal, traditional self-help organisations that make up a significant percentage of diaspora groups. It is important that real partnerships are developed that accept the limitations and build on the strengths of diasporas.This will take time and recognition on both sides but will bring benefits.

- **Many governments now recognise that their diasporas can support national development from abroad**. As a result they have begun to give 'their' migrants special rights, protections and recognitions. For example, in 1998 the Indian government launched a huge sale of five-year bonds guaranteed by the State Bank of India and available only to non-resident Indians (NRIs).There were significant benefits to make the bonds attractive including the option of redemption in US dollars or German marks and exemption from Indian income and wealth taxes. Similarly, the Philippine government has created incentives including tax breaks and privileged investment options for Filipinos abroad. Governments' involvement with their diasporas takes different forms and has differing priorities. The most immediate positive effects on poverty are likely to come from plans that aim to maximise the income that comes from remittances and goes directly to households**.**

Are remittances a new development paradigm or another destabilizing force of globalization?

- Remittances are one of the most visible . and beneficial . aspects of how international migration is reshaping the countries of origin. In a variety

ISSN 2076-9202

of settings they are quietly transforming societies and regions and are the most manifest example of selfhelp undertaken by poor households in the global arena. Their role is particularly important in augmenting private consumption and alleviating transient poverty in receiving countries. However, their effects on structural poverty and long-term economic development, are less well understood. Unlike foreign aid, remittance flows do not put any burden on taxpayers in rich countries. Nonetheless, they occur only to the extent that emigrants from poor countries can work in richer countries. It is clear that countries that are *de facto* much more open to immigration are also the principal sources of remittances and in so far as these constitute substantial sources of external finance to poorer countries, should they not be viewed as a country.s contribution to poor countries?

Effects of financial remittances

The effects of remittances are complex and are a function of the characteristics of migrants and the households they leave behind, their motivations, and the overall economic environment. Remittances are a form of household transfers and its motivations include altruism, as an implicit intra-family contractual arrangement or as an implicit family loan. The relative importance of motives appears to vary with the institutional setting. Remittances finance consumption, land and housing purchases and philanthropy; they are an important source of social insurance in lower income countries; and they provide liquidity for small enterprises (in the absence of well functioning credit markets) as well as capital investments in equipment,

ISSN 2076-9202

land, wells and irrigation works and education with longer-term implications for economic development. However, at this point it is important to dispel one myth surrounding remittances . that remittances compensate for the brain drain. It is often argued that while poor countries might loose the scare factor that is critical for development (human capital), they gain another scarce factor, namely financial resources in the form of remittances. The two are not substitutes. Although, as we shall note later, emigrants are positively selected, remittances are not a quid pro quo for the brain drain for several reasons. The real detrimental effects of the brain drain for developing countries arise from the migration of the upper end of human capital distribution, comprising of engineers, scientists, physicians, professors etc.

As a whole, it consider migration to be desirable when it is seen as:

- an opportunity for inclusive development
- serving the interests of capital: shift in 'reserve army of labour discourse' to empowerment and agency, rational decision-making
- modernity and progress
- a way out of poverty
- Remittance can be utilized as Micro credit
- strengthening social capital, social structures and networks
- as a form of population control (population size and composition)

Suggestions

To maximise the benefits and reduce the risks of migration for poor people and Inclusive development, a number of important issues need to be addressed:

ISSN 2076-9202

- Policy attention is needed urgently in the areas of developing social security systems for migrants, building human capacities so that their bargaining power vis-à-vis employers and law-keepers is improved. There is also the need to strengthen data on migration trends, the impacts of migration on poverty, and occupational mobility, so that policy reforms can be introduced to maximize the benefits to migrating individuals and society at large.

- Policy makers need to recognize the importance of migration for poverty reduction and inclusive development. Policy should aim to ease the hardship of migrants and facilitate a flexible labour force in the short term, in order to distribute the benefits of growth as evenly as possible. But there is a need to build human capabilities over the long term so that people who currently have to depend on such livelihood strategies can diversify into more remunerative options.

- Countries of origin can enter bilateral agreements with countries of destination to design incentives for migrants to return, both to bring savings and new ideas back to source communities and to minimize the disruption of families for migration.

- Governments can limit the direct costs of finding employment overseas. First, they can ensure that the cost of obtaining a passport represents a low income share. To limit migration costs, several Asian countries have licensed companies to recruit immigrants for low-skilled jobs, which can lower the cost of migration because recruiters can provide information

ISSN 2076-9202

on, or even negotiate, lower transportation costs, passports, and work visas. However, such companies should always be monitored by governments to ensure that emigrants are not exploited.

- International migration could stimulate development through remittances, brain circulation and the contributions of transnational communities, but it should not be pursued as the vehicle or strategy for development. Such an approach promotes short-term socioeconomic "stability" and contributes to limited survival opportunities rather than sustainable.
- Governments could establish portable pensions for migrants to access in their country of origin. If migrants benefited in their countries of origin from social welfare contributions made while in their destination countries, they may be more likely to return home.
- The immediate need is to change the policy level discourse on migration by reviewing key documents and policies and moving away from theory and language which portrays migration as bad and something that must be stopped. Other Asian countries have recognized the need to support migrant workers and reduce their vulnerability by improving their access to education, housing and health programmes. India needs to take similar steps urgently.
- create a working group on remittances whose main tasks would be to adopt an operational definition of remittances, and monitor and report cross-border and domestic remittances. There may be lower remittance costs through the development of appropriate legislative

ISSN 2076-9202

frameworks for remittances, as well as through innovation and the use of technologies.

- Expand both cross-border and domestic remittance services, fostering financial inclusion and improving the dissemination of information on recorded systems among remittance senders and receivers. As remittances' developmental impacts are limited in scale, it is fundamental to continue supporting rural livelihoods, expanding access to basic service delivery, protecting vulnerable businesses, creating employment and strengthening social protection systems.

- Remittances' developmental impacts are likely to be further enhanced under the framework of pro-poor human and sustainable development policies that address persisting inequalities.

- Migrants should not be viewed as "milking cows" for the development of their home countries. They can indeed contribute to sustainable development, but it should be in a voluntary and participatory way. States and civil society organizations in destination countries can provide appropriate support.

- Financial literacy training programs should be established to help migrants increase their understanding of, and access to, formal banking systems in destination countries, while the development of credit unions and community-based micro-finance institutions represents another way of extending financial services to remote rural areas in countries of origin.

ISSN 2076-9202

- Support for migrant organizations — such as hometown associations — by governments and civil society actors is one way to boost informal social networks that help to ensure the basic safety of migrants.

- Hawala and other informal funds transfer systems play a key role in facilitating remittances. Governments need to ensure that such systems are not abused by criminals, but should also ensure that regulatory solutions are proportionate to the risks and sensitive to the possible impacts on those who rely on remittances

Conclusion

Migration is a complex phenomenon and given the new challenges posed by a 'globalised' and rapidly changing world, drawing lessons from the mass migration of the past century is not an easy task either. India has clearly achieved a large sustained level of remittances. Policy initiatives by the government and banking institutions have achieved two significant results. First, most remittances flow thorough formal channels. Second, an increasing number of remitters have moved from being pure "savers" to "investors." The Indian policy regime has demonstrated its ability to attract NRI capital through NRI deposit accounts and successive bond issues. The challenge is to channel some of these flows for socio-economic development. If the government and the banking community are strategic, they could offer higher rates of return on remittance receipts placed in specified assets in the domestic capital market. Investing in microfinance operations would be a good place to start, given their success in India. The Indian diaspora has proven responsive to incentives Offering investment options that are tied to development goals could be a winning strategy.

Therefore, Migrants make a valuable economic, political, social and

cultural contribution to the societies they have left behind. The remittances that migrants send home play an important part in alleviating poverty in countries of origin, and can also support the development process if the governments of those countries provide a conducive environment for economic growth. Migration helps to limit the level of unemployment and underemployment in countries that have an excess supply of labour. Individual migrants and diaspora associations make financial and other investments in their homeland, strengthening the economy, serving as conduits for new ideas and enriching understanding between countries of origin and destination. When migrants go back to their own country, whether on a temporary or long-term basis, they take new skills, experiences and contacts with them, vital assets in a global economy and achieve inclusive development

REFERENCES

CUTS International (2008) Exploring the post-1990s trade-labour linkage in India. A set of case studies from West Bengal, Maharashtra and Gujarat. CUTS International, Jaipur.

Deb, U. K., Nageswara Rao, G.D., Mohan Rao, Y., Slater, R. (2002) Diversification and Livelihood Options: A Study of Two Villages in Andhra Pradesh, India 1975–2001 Working Paper 178

International Labour Organization, "Poverty Reduction Strategy Papers (PRSPs): An Assessment of the ILO's Experience." GB.283/ESP/3.). Geneva: International Labour Office, 2002

Lucas R.E.B. (2005) "International Migration Regimes and Economic Development" *Edward Elgar Publishing* Maimbo, S. M., R. H. Adams, R. Aggarwal and N. Passas, 2005, *Migrant Labor Remittances in South Asia*, World Bank, Washington, DC

Mosse, D., Gupta, S., Mehta, M., Shah, V., Rees, J and the KRIBP Project Team (2002).

Nayyar, D. (2000) 'Cross Border Movements of People', *World Institute for Development Economics Research Working Paper* no.194, UN

Orozco, M., 2005, "Regional Integration? Trends and Patterns of Remittance Flows within Southeast Asia", Southeast Asian Workers Remittance Study, ADB.

UNESCAP, 2003, "Migration patterns and policies in the Asian and Pacific Region", Asian Population Studies, Series No. 160, United Nations, New York.

Zachariah, Kannan and Rajan (2002). Kerala's Gulf Connection. Centre of Development Studies on International Migration, Kerala State, India. CDS Thiruvananthapuram.

ISSN 2076-9202

The Role of Total Quality Management in Performance Improvement of New Enterprises (Case Study: Insurance Industries of Northern Iran)

[2]Mohammad Taleghani (corresponding author)
Department of Industrial Management, Rasht Branch, Islamic Azad University, Rasht, Iran
Tel:+989111314029
E-mail:M.taleghani454@yahoo.com

[3]Seyyed Javad Mousavian
Department of Business Management, Rasht Branch, Islamic Azad University, Rasht, Iran
Tel:+989113354617
E-mail:saba_moosaviyan@yahoo.com

Abstract

Today the organization to maintain its survival and progress in the competitive world need to institutional innovation. Accordingly recent emphasis has been on the role of total quality management in organizational innovation. Total quality management is a function that will be affected by many factors that considering to these factors will ensure the success of the organization in achieving excellent results. This study attempted to examine the relationship between the components of total quality management and organizational innovation in the insurance industry in Guilan. Based on this research to formulate hypotheses has been to investigate whether the total quality management and innovation, there are significant institutional interface. For this purpose was used the field method and then using a questionnaire has been measured each one component of the research Such as total quality management (autonomy, internal communication, consultation, quality flexibility, and support management methods and organizational innovation) and *finally, relationships between variables was evaluated with Pearson correlation test and this result was achieved that TQM has a direct impact on organizational*

[2]. Associate professor(corresponding author)

[3] . Master

innovation and also there is no meaningful relationship between domestic Communication, autonomy and quality flexibility, with organizational innovation And there is a direct relationship between consultation and support with organizational innovation.

Keywords: Organizational Innovation, TQM, Autonomy, Internal Communication, Consultation, Quality Flexibility, Support Management

1- Introduction

Key is considered words quality and a magic word, although is significant differences in a different field of work, in the concept, application and quality issue position and can be found less than a category that such a comprehensive, Due to has involved his professional and is converted general indicators for assessing progress and career success. Therefore everyone continually seek effective ways to increase and improve the quality of their products and services and occasionally found a new way that promise quality creation and of quality problems solving. (Bayazita et al., 2007)

Perhaps the term Total Quality Management (TQM) is one of the most common terms of trade that in recent years has been applied about all recorded attempts to promote and improve of quality (Jafari, 2004) Total quality management Combine clear objectives with revolutionary approach for change and includes all aspects of the work - of identify the customers' needs to assess customers based on whether are satisfied or not. (Bayazita et al., 2007).Today we live in a society so-called network that in it, the organization of knowledge, individual creativity and learning ability are considered as a work valuable resource and capital. The combination of knowledge and creativity in a favorable environment leads to innovation. (Taa Tila et al., 2006) However our managers should try a favorable environment and by using Innovative creative thinking, and a suitable culture for fostering creative thinking in their schools Increase their performance qualities.

2. Literature Review

Defining TQM as a philosophy is key in differentiating TQM from management fads. Paton (1994) stated: TQM is a philosophy, not a science. Philosophies are seldom suddenly born, and they almost never die; they simply get improved upon. Therefore, a philosophy can be negotiated and renegotiated, adapted to differences within an organization, and cannot be a simple formula or solution to organizational problems. The structure of TQM in an organization lies in the basic values that a manager has to figure out in order to implement it in the organization. Therefore, TQM as a philosophy acts as a theoretical base for making organizational change. In

other words, it is a set of values or a way to reorganize a business, and not a cut-and-paste technique (Miller and Hartwick, 2002; Paton, 1994).

Organizations should be well informed the benefits of TQM practices. In other words, encouraging TQM practices produce beneficial effect on people. When fully implemented, TQM brings good benefits to organization in term of quality, productivity, and employee development (Lawler et al., 1995). People are most important resources in dedicating their effort of achieving the high level of quality product and service. Moreover, many of the basic elements of TQM deal with people such as team work creativity, innovation, extensive training, high level of communication, employee and management trust, and quicker decision making. Without their honest self-scrutiny and purposeful analysis, and without their commitment toward common goals, the organization may fail to achieve its objectives. In fact, most of the successful TQM implementations depend heavily on changes in employees' attitudes and activities. The employees who will be affected most directly are the agents of change in organization that are involved in implementing TQM or other programs for continuous improvement. But what is the impact of these changes on the employees and does TQM provide benefit for the employees. The influence of TQM processes will produce positive impact on employees; improve level of satisfaction and commitment, and organizational effectiveness. Consequently, TQM must focus not just on the quality of product but also on the quality of its employees to remain an effective management approach. Many organizations that adopted quality management practices have experience an overall improvement in organization performance such as attitude, commitment, and effectiveness. Butler (1996) found that companies that use TQM practices achieved better employee relationship (i.e. employee satisfaction, attendance, turnover, safety, and health).

McAdam et al. (1998), in comparing TQM—as represented by continuous improvement—to innovation in 15 companies in Ireland, report two important results. First, they find that there is a significant and very high correlation between the overall continuous improvement score and innovation score, suggesting that continuous improvement can act as a solid foundation on which to build an innovative organization. Second, through a qualitative study, they find that certain practices reflecting a culture of continuous improvement exist in the organizations deemed to be innovative. They conclude, therefore, that the strong correlation between continuous improvement and innovation scores is not simply a correlation but suggests a causal relationship, meaning that the introduction of continuous improvement over a period of time will lead to increased innovation. Baldwinand Johnson (1996) fined that the adoption of TQM as a management strategy contributes significantly in differentiating the more-innovative organizations from the

less-innovative ones.

To implement a TQM program, Levy (2003) recommends five necessities. First, the support of top management must be sought and senior management must receive training on what TQM is, how it operates, and what their responsibilities are for effective implementation. Second, employees need to be trained on quality methods. Even the lowest level employee is empowered to take steps toward quality improvement, when and where necessary (Jex,2002). For effective TQM implementation, for instance, all employees should have access to quality control data and be encouraged to act on problems related to product quality. Third, employees are also expected to be trained on the processes and procedures of TQM. Such training should center not only on identification of areas in which department or division excels, but also areas of deviation from quality standards (i.e. errors). The potential causes of these deviations or output variations are examined, corrected, and brought within the range of expected quality. The fourth goal is self-comparison analysis, whereby the organization compares its effectiveness to that of the competitors who were used to set the goals. The fifth necessity is the linking of rewards to the achievement of the TQM intervention's process goals (see Cummings and Worley, 2001; Ehigie and Akpan, 2004).

Total quality management approach in organizations such as insurance is very important who Customers do not buy their products as volunteer. Because central this approach is attention to customer needs. In the insurance industry, the general attitude and philosophy based on principles of marketing, is that nobody buys our products, but it must be sold (sales orientation) and therefore requires a national insurance agency With appropriate actions such as quality service delivery and quality, and other incentive policies, stimulate people to buy their products. So can be easily found that one of the success factors a national insurance is use of Principles and theories of management, including quality management Because central total quality management is customer needs and continuously improve all products, services and process.

TQM implementation, which is used in this study include autonomy, internal communication, consultation, quality flexibility and support management methods. The researchers seek to answer to this question that is there a relationship whether between implementation of TQM practices and organizational innovation in the insurance industry of Iran (Guilan)?

ISSN 2076-9202

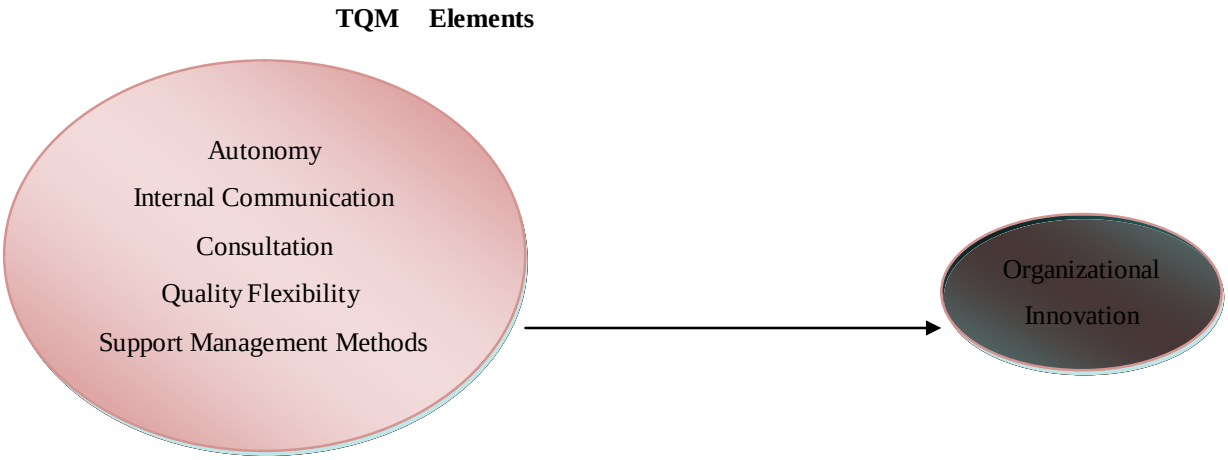


Figure1. research model (Abrunhosa,Moura Ee sa,2008)

2.1 Total Quality Management (TQM)

The importance of Total Quality Management (TQM) in the manufacturing and service organizations has been significantly increased within the past twenty years. However, there is no consensus among practitioners and scholars concerning the meaning of the term "quality." This confusion may be related to different aspects of quality, the way it has been defined, and the approach that has been taken to conceptualize it. The origination of TQM and its philosophical approaches should be attributed to the Japanese approach towards quality improvement after World War II. Through the collaboration of Japanese scientists, engineers, governmental officials, and policy makers, along with the works of Deming and Juran, the Japanese developed a management philosophy that later entitled Total Quality Management (TQM) (Walton, 1986; Powel, 1995). In fact, the concept of quality has evolved from basic manufacturing and engineering-related activities to a philosophy that encompasses all organizational activities and processes. What today is defined as TQM has its origin in the ideas of quality gurus (Deming, Juran, Crosby, Feigenbaum, Ishikawa) whose primary goals were customer satisfaction and continuous improvement. Despite the number of articles and studies, TQM is an ambiguous concept (Dean and Bowen, 1994). The differences between the various frameworks proposed by quality experts and scholars have contributed to the ambiguity of TQM definition, concepts, and constructs. Differences are due to the fact that different

people have different. Understanding of the term "quality," and, in that regard, the way they define quality may result in different constructs and models for TQM.

A baseline technical definition of what TQM is all about has been given by the American Federal Office of Management Budget Circular (cited in Milakovich, 1990, p. 209), "TQM is a total organizational approach for meeting customer needs and expectations that involves all managers and employees in using quantitative methods to improve continuously the organization's processes, products and services."

According to the latter definition TQM is not merely a technical system. In fact, TQM is associated with the organization itself, which is also a social system. Pike and Barnes (1996) argue that organizations are not only technical systems, but also human systems. In addition, Oakland (1993) states that TQM is an attempt to improve the whole organizations' competitiveness, effectiveness, and structure. For Dale (1999), TQM is the mutual co-operation of everyone in an organization and associated business processes to produce products and services, which meet and, hopefully, exceed the needs and expectations of customers. TQM is both a philosophy and a set of management guiding principles for managing an organization. (p. 9)

From the above definitions, we can identify two important aspects that comprise TQM: management tools and techniques as well as management concepts and principles. The techniques refer to what has been referred to as the "hard" aspects of TQM, while the principles refer to the "soft" side.

Objectives of TQM:

Process improvement

Defect prevention

Priority of effort

Developing cause-effect relationships

Measuring system capacity

Developing improvement checklist and check forms

Helping teams make better decisions

Developing operational definitions

Separating trivial from significant needs

Observing behaviour changes over a period of time

TQM revolves around:

Commitment by Senior Management and all employees

Effective strategy, vision, mission and goals

Customer/ Supplier relationships

Communication

ISSN 2076-9202

Tools and techniques for improvement

Team work

Systems to facilitate improvement

And most of all TRUST

Table 1. History of Quality Control

1900	Quality control by the operator (worker)
1910	Quality control by Head of worker
1915	inspection Quality Control
1940	Statistical Quality Control
1960	Defined of quality as quality assurance and quality management (comprehensive quality control)
1980	Birth of total quality management

Table 2.Old and new Culture about the quality

Quality elements	**From the perspective of the past**	**From the perspective of the TQM**
Definition	Product-oriented	Customer-oriented
Decisions	Short-term	Long Term
Emphasis	cross-examination	Prevention
Error source	Staff	System
Responsibility	Quality Control Department	All employees
the problem Solution	Management	Groups
Gaining	Price	Life-cycle costs, partnership
Manager role	Planning, assign tasks, control, force acts	Delegated authority, guidance, facilitator and trainer

2.2 Organizational Innovations

According to De Furia (1997), the benefits that an organization can have of the high level of trust include: stimulation of innovations; movement towards high emotional stability; facilitation of acceptance and openness for free expression and encouragement for risk acceptance. As opposed to the above-mentioned, the consequences of the low level of trust imply: lack of understanding when it comes to values and motives of other employees; non-efficient communication; reduced possibility of recognizing and accepting good ideas; increasing the efforts for obtaining relevant information; increasing the control mechanisms – self-control is

replaced by external control; increase of rejection, defensive and hostility; delayed implementation of activities and projects; mentality „victory-victory“ is replaced by „victory-defeat“ (De Furia,1997).

Theoretically, research on organizational innovation opens new perspectives on a number of interesting issues that have surfaced recently, including the issues of societal evolution and institutional change, the dynamics of knowledge societies (Bell 1973, Hage & Powers 1992), and the integration of macro and micro levels of analysis. Beyond sociology, organizational innovation can make important contributions to several important arenas of new research in economics. The most obvious one is research on national systems of innovation (Lundvall 1992, Nelson 1993), but it is equally relevant to endogenous theories of economic growth (Romer 1986, 1990, Solow 1992) more generally.

Organizational innovation has been consistently defined as the adoption of an idea or behavior that is new to the organization (Damanpour, 1988, 1991; Daft & Becker, 1978; Hage, 1980; Hage & Aiken, 1970; Zaltman, Duncan & Holbek, 1973; Oerlemans et al., 1998; Wood, 1998; Zummato & O.Connor, 1992). The innovation can either be a new product, a new service, a new technology, or a new administrative practice. The research usually focuses on *rates* of innovation and not on single innovations except in the instance of diffusion studies (e.g. Collins et al 1987, Ettlie et al 1984, Walton 1987) where the speed of adoption is an issue. The importance of studies of innovation rates rather than a case study of a single innovation must be stressed. In the met analysis of Damanpour (1991), he found that the greater the number of innovations considered in the research study, the more consistent the findings. This is an important conclusion, namely, that the focus on rates of a phenomenon will produce more consistent results than the analysis of a single event.

3. Research hypotheses

1- There is relationship between TQM Implementation and Organizational Innovation.

2- There is relationship between Autonomy and Organizational Innovation.

3- There is relationship between Internal Communication and Organizational Innovation.

4- There is relationship between Consultation and Organizational Innovation.

5- There is relationship between Quality Flexibility and Organizational Innovation.

6- There is relationship between Support Management methods and Organizational Innovation.

4. Research Methodology

Research methods is "descriptive - correlation". Statistical Society is includes all

head administration and supervision of the insurance industry in Guilan which is comprised of 23 branches. In this study is used the stratified random sampling. Sampling was conducted based on the following conditions:

- Companies that have more than five branches: three samples
- Companies that have between 2 to 5 branches: 2 samples
- Companies that have only one branch: 1 sample

The research sample was comprised of 23 branches.

For assess the validity of question used Content validity method. Questionnaire to measure the reliability of each variable using Cronbach's alpha coefficient was greater than 70% shows that questionnaire is reliability. Also Correlation method is used to test research hypotheses.

5. Data analysis

20 respondents are male and 3 female.

2 person of respondents were Associate Degree, 14 bachelor, 7 person master & over.

1 person of respondents were between 25 to 30 years, 3 between 30 to 35 years, 9 between 35 to 40 years, 4 between 40 to 45 years and 5 between 45 to 50 1 between 55 to 60 years old.

Experience of respondents: 1 person was between 1 - 5 years, 1 between 5 - 10 years, 7 between 10 - 15 years, 5 between 15 - 20 years, and 2 were between 20 - 25 and 3 have between 25 to 30 years of experience.

Table 3) Pearson Correlation test

hypotheses	Pearson Correlation	SIG	Hypotheses status
H1	47/7 %	0/021	Confirmed
H2	37/4	0/079	Rejected
H3	14/6	0/507	Rejected
H4	51/4	0/012	Confirmed
H5	25/7	0/226	Rejected
H6	45/7	0/028	Confirmed

In the first hypothesis is positive and significant relation between TQM and organizational innovation about 23 percent of TQM can predict by organizational innovation. Test this hypothesis by comparing the results with that of

NuriaLo´pez-Mielgo in year (2009) showed that between the capacity for innovation and quality management, there is a positive the relationship. Also research by M.Giebel,H.Essmann,N.Du preez,R.Jochem in 2009 showed that Between TQM and innovation in organizations, there is a positive the relationship and also Hui study in 2008 showed that There is a positive the relationship between TQM and technological innovation.

The second hypothesis could be found that there is no significant relationship between autonomy and organizational innovation.

The third hypothesis can be found that between internal communication and organizational innovation, there is no meaningful the relationship.

In the fourth hypothesis, there is a significant the relationship between consultation and organizational innovation. So that consultation variable can predict about 27 percent organizational innovation.

The fifth hypothesis could be found that there is no significant relationship between Quality flexibility and organizational innovation

The relationship between support management methods and organizational innovation in the sixth hypothesis, there is significant so that support management variable can predict about 21 percent organizational innovation.

6. Conclusions and suggestions

With the increasing developments and transformations in the current world is that era of information and communication and due to the instability and variability and unpredictable nature of these changes what the countries of the world especially in developing countries in order to increase productivity and help them deliver development. Certainly use the opportunity in competition with other countries .This is not possible unless with management of innovation and creativity together in order to grow and flourish organization and as a result community attempt. Results of this study can be used by managers to improve their performance actions can be more serious. According to first study confirmed the hypothesis that there is a significant relationship between TQM and organizational innovation, we can offer the following suggestions:

1- Senior director should be involved staff in the TQM effort. Therefore is suggested managers consider to comments and suggestions and ideas of employees and necessary conditions and facilities deliver to provide and do new things, innovative and creative in organization.

2 - According to the second hypothesis of this study based on the autonomy and

organization innovation rejected. This can be due to lack of support from managers to adopt a participatory decision making. So it is recommended that the organizations created the space that people can participate in the making decisions and have be active role in the planning, timing and work quality control.

3- Considering that the third hypothesis of this study rejected based on the internal communication and organizational innovation, this can be due to inadequate communication between the units or groups. Thus is proposed that is considered to vertical communication (hierarchical), communication in among parts and return communication (inside part) and accessibility managers and employees to be added together.

4- according to fourth research hypothesis that a significant relationship between consulting and organizational innovation can be offered the following suggestions:

- Make a system for collecting employee suggestions
- Employee involvement in decision making

5- According to fifth hypothesis of this study rejected based on the relationship between quality flexibility and organizational innovation, the reason for this lack of adequate training or can be considered inappropriate selected with regard to flexibility. Thus is recommended:

- The use of rotation job
- development competencies that employees have several duty
- Specialist Professional Learning
- Employee selection based on the overall capabilities (education, qualified to perform specific tasks)

6- According to sixth research hypothesis based on relation between support management and organizational innovation, the following suggestions are provided:

- Continuing education and training
- Implementation plan Performance Evaluation

References

Abrunhosa, Ana, Moura e Sá, Patrícia (2008), "Are TQM Principles Supporting Innovation in the Portuguese Footwear Industry?", Technovation, 28(4), 208-221.

An Ho-Li.(2010),"Meditation,Learning,Organizational innovation and performance",Emerald,vol. 111,No.1,pp.113-131.

Ana Abrunhosa, Particia Moura E sa. (2008), Are TQM principles innovation in the Portuguese footwear industry?, Technovation 208-221.

Armbrustera , Heidi. Bikfalvib, Andrea. Kinkela, Steff Laya, Gunter. (2008),vol.28,pp.644-657, Organizational innovation: The challenge of measuring

non-technical innovation in large-scale surveys, Technovation

Baldwin, J.R., Johnson, J. (1996) , Business strategies in more- and less innovative firms in Canada. Research Policy 25, 785–804.

Bayazita, ozden. Birsen karpakb .(2007),An analytical net work process-based framework for successful total quality management (TQM): An assessment of Turkish Manufacturing industry readiness, PP.79-96.

Bell D. (1973), Post.Industrial Society. NewYork: Free Press

Bou-Liusar,J.carlos,Ana B.Escring-tena, vi cente Roca-Puig, Inmaculada Beltra n-mar tin .(2009), An empirical assessment of the EFQM exce llence model: E valuation as a TQM foramework relutire to the MBNQA Mode. PP.411-418.

Bounds, G.M. (1995), Management: A Total Quality Perspective, South Western College Publishing, Cincinnati, OH.

Butler, D. (1996), "A comprehensive survey on how companies improve performance through quality efforts", David Butler Associates, Inc., CA.

Chin,K.S,K.F. pun,Y XU, J.S.F. clan .(2002), An AHP based study of critical faetors for TQM implementation in sha n ghal manufacturing industries. Pp. 707-715.

Clinton, R.J., Williamson, S. and Bethke, A. (1994), "Implementing total quality management: the role of human resource management", SAM Advanced Management Journal, Vol. 59 No. 2, pp. 10-16.

Collins P, Hage J, Hull F. (1988), Organizational and technological predictors of change in automaticity. Acad. Mgmt. J. 31:512.43

Cummings, T. & Worley, J. (2001). Organization Development and Change (7th ed.). Cincinnati, OH: Southwestern College Publishing, Inc.

Crosby, P.B. (1979), Quality is Free: The Art of Making Quality Certain, Hodder & Stoughton, New York, NY.

Daft R, Becker S. (1978). Innovation in Organizations: Innovation Adoption in School Organizations. New York: Elsevier

Dale, B. G. (1999), TQM: An overview. In B. G. Dale (Eds.), Managing quality (3rd ed., pp. 3-33). Oxford, UK: Blackwell-Business.

Damanpour F.(1988), Innovation type, radicalness and the adoption process. Commun. Res. 15:545.67

Damanpour F.(1991), Organizational innovation: a meta-analysis of effects of determinants and moderators. Acad. Mgmt. J. 34: 555.90

Daniel I. Prajogo, Amrik S.Sohal. (2004), The multidimensionality of TQM practices in determining quality and innovation performance – an empirical examination, tec novation, pp. 443-453.

Daniels, A.C. (2000), Bringing out the Best in People: How to Apply the Astonishing Power of Positive Reinforcement, McGraw-Hill, New York, NY.

De Furia G.L. (1997). Facilitators Guide to the Interpersonal Trust Surveys, Pfeiffer&Co.

Dean, J.W., Bowen, D.E.(1994), Management theory and total quality: improving research and practice through theory development.

Deming, W.E. (1982) Quality, Productivity, and Competitive Position, MIT Center for Advanced Engineering Study, Cambridge, MA.

Dobni,c. Brook.(2008), measuring in oration culture in organization,. European journal of Iroration management, val 11, No 4,pp.539-559

Donnelly, J.H. Jr, Gibson, J.L. and Ivancevich, J.M. (1995), Fundamentals of Management, Irwin, Homewood, IL.

Easton, G. and Jarrell, S. (1998), "The effects of total quality management on corporate performance: an empirical investigation", The Journal of Business, Vol. 71 No. 2, pp. 253-307.

Ehigie, B.O. and Akpan, R.C. (2001), "Development and standardization of individual practice of total quality management (TQM) scale", Nigerian Journal of Psychology, Vol. 17 No. 1, pp. 12-24.

Ettlie JE, Bridges WP, O.Keefe RD.(1984), Organizational strategy and structural differences for radical versus incremental innovation. Mgmt. Sci. 30:682.95

Feigenbaum, A. (1991), Total Quality Control, McGraw-Hill, New York, NY.

Flynn, B.B.,(1994), The relationship between quality management practices, infrastructure and fast product innovation. Benchmarking for Quality Management and Technology 1 (1), 48–64.

Flynn, B.B., Schroeder, R.G., Sakakibara, S., (1994), A framework for quality management research and an associated measurement instrument. Journal of Operations Management 11 (4), 339–366.

Grant, R., Shani, R. and Krishnan, R. (1994), "TQM's challenge to management theory and practice", Sloan Management Review, Vol. 35 No. 2, pp. 25-36.

Gustafson, D.H., Hundt, A.S., (1995), Findings of innovation research applied to quality management principles for health care. Health Care Management Review 20 (2), 16–33.

Hackman, R. and Wageman, R. (1995), "Total quality management: empirical, conceptual, and practical issues", Administrative Science Quarterly, Vol. 40 No. 2, pp. 309-42.

Hacsever,c .(1996), Total Quality management in the small business environment . Business horizons,vol.39, No pp.33-41.

Hage J, Aiken M. (1970), Social Change in Complex Organizations. Englewood Cliffs, NJ: Prentice-Hall

Hage J, Powers C. (1992), Post-Industrial Lives. Newbury Park, CA: Sage

Ishikawa, K. (1976), Guide to Quality Control, Asian Productivity Organization, Tokyo.

Jayaram, Jayanth.L Ahira, San jay Dreyfus, Paul.(2009), Contingency relationships of firm size, TQM duration, unionization, and industry context on TQM implementation. A focus on total effects. PP.18.23.

Jex, S.M. (2002), Organizational Psychology: A Scientist-Practitioner Approach, Wiley, New York, NY.

Julia C. Naranjo-Valencia , Daniel Jime´nez-Jime´nez and Raquel Sanz-Valle.(2011) , Innovation or imitation, The role of organizational culture, 55-56

Juran,J.M. (1993) ,Why quality initiatives fail, Journal of Business Strategy, 14 (4), 35-38.

Lawler, E.E. III, Mohrman, S.A. and Ledford, G.E. Jr (1995), Creating High Performance Organizations, Jossey-Bass, San Francisco CA.

Levy, P.E. (2003), Industrial/Organizational Psychology: Understanding the Workplace, Houghton Mifflin, Boston, MA.

Lundvall BA. (1992), National Systems of Innovation: Towards a Theory of Innovation and Interactive Learning. London: Pinter

M.Giebel,H.Essmann,N.Du preez,R.Jochem.(2009),Improved innovation through the integration of Quality Gates into the Enterprise and product Lifecycle Roadmaps, ELSEVIER,pp.199-205

magnus,svensson, .(2004), TQM-Based self-assessment in educational organizations help or Hindrance. Doctoral thesis .Lu Lea University of technology.

Martinez-Lorente, A., Dewhurst, F. and Dale, B. (1998), "Total quality management: origins and evolution of the term", The TQM Magazine, Vol. 10 No. 5, p. 378.

McAdam, R., Armstrong, G., Kelly, B., (1998), Investigation of the relationship between total quality and innovation: a research study involving small organizations. European Journal of Innovation Management 1 (3), 139–147.

Milakovich, M. E. (1990). Total quality management in the public sector. National Productivity Review, 10(2), 195-215.

Miller, D. and Hartwick, J. (2002), "Spotting management fads", Harvard Business Review, Vol. 80 No. 10, p. 26.

Morgan, C., & Murgatroyd, S. (1997). Total quality management in the public sector. Buckingham, UK: Open University Press.

Nelson R. (1993), National Systems of Innovation. New York: Oxford Univ. Press

Nieto, mariano.(2004)." Basic propositions for the study of the technological innovation process in the firm" European Journal of Innoratan maragement,vol.7,No. 4,pp.314-324

NuriaLo´pez-Mielgo a,, Jose´ M. Montes-Peo´n b, CamiloJ.Va´zquez-Orda.(2009),

Are quality and innovation management conflicting activities? , technovation, 537-545

Oakland, J. (1993). Total quality management: The route to improving performance. London: Butterworth Heinemann.

Oerlemans L, Meeus M, Boekema W.(1998), Do networks matter for innovation? The usefulness of the economic network approach in analyzing innovation. Tijdschr. Econ. So. Geogr. 89(3):298-309.

Osland, O. (1997), "Impact of total quality attitude management and training, and work context on attitude supervisor", International Journal of Organization Analysis, Vol. 5 No. 3, pp. 291-301.

p.taatila, resa; suo mala, jy , ki; siltala, Reigo; keskinen, soili.(2006), (Frame work to study the social innovation network) European journal of innovation management, v,1.9,No. 3, pp. 312-326 .

Paton, S. (1994), "Is TQM dead?", Quality Digest, pp. 1-5.

Powell, T.C. (1995), "Total quality management as competitive advantage: a review and empirical study", Strategic Management Journal., Vol. 16 No. 1, pp. 15-37.

pui- mun lee, is Assistant professor at the Nan yang Technological university, Singapore. (2002) , Vol.14, No.3, pp. 142-149

Punnakitikashem,prattana-laosirihongthong,Tritos-Adebanjo,Dotun-W.Mclean,Micha el.(2010),Astudy of quality management practices in TQM and non-TQM firm, Emerald,vol.27,No.9,pp.1021-1035

Robertson, P. (1994), "The relationship between work setting and employee behavior: a study of a critical linkage in the organizational change process", Journal of Organizational Change Management, Vol. 7 No. 3, pp. 22-44.

Romer P. (1986), Increasing returns and long run growth. J. Polit. Econ. 94:1002.37

Solow RM.(1992), Siena Lectures on Endogenous Growth Theory. Siena: Univ. Siena

sharma, monica. Rambabu Kodali .(2008), TQM implementation for manufacturing excellence. The TQM magazine, vol. 20 No .6.pp 599-621.

Tran Hoang, phillip.(2009), Researching and analyzing the importance and solution for implementation of total Quality Management (TQM)within a marketing department. A project presented to the faculty of California state university domain kills in partial full fillment of the requirement for the degree. Master of Science in quality assurance.

victor j.garcia_morales and Francisco j.lirens-montes.(2006),organizational innovation and organizational learning in entrepreneurship, emerald ,vol.106,No.1,pp.21-42.

Walton R.(1987), Innovating To Compete: Lessons for Diffusing and Managing Change in the Workplace. San Franciso, CA: Jossey-Bass.

Watson, J. and Korukonda, A. (1995), "The TQM jungle: a dialectical analysis", The International Journal of Quality & Reliability Management, Vol. 12 No. 9, pp. 100-10.

Wilson, D. (1995), "Deming's 14 point plan for TQM", available at: www.educesoft.com/quality/ demming.htm (accessed March 23, 2004).

Wood E. (1998), Determinants of innovation in SME.s. See Michie & Smith, pp. 119.45

z. Hoque. (2003),total quality management and the balanced Scorecard approach: A critical analysis of their potential relationship and direction for research. Critical perspective "accounting. Vol. 14,pp.553-556.

Zairi, M., (1999), Best Practice Process Innovation Management. Butterworth Heinemann, Oxford.

Zaltman G, Duncan R, Holbek J. (1973), Innovations and Organizations. New York: Wiley

Zammuto R, O.Connor E. (1992), Gaining advanced manufacturing technologies benefits: the role of organizational design and culture. Acad. Mgmt. Rev. 17: 701.28

ISSN 2076-9202

"An exploratory Study on development of Maestro Leadership capacities for inclusive growth and sustainable future"

Author

Dr. Renita Dubey

Amity institute of Competitive Intelligence and Strategic Management

Amity University, Noida

Email: renita.dubey@gmail.com, Phone: 01204392218/ 7503419660

Abstract

Globalization is a complex phenomenon that has far reaching effects. Nowadays, managers need to understand social, economic, political and legal ramifications of global markets. This paper is devoted to advocating sustainable development and competitive advantage through showcase of right leadership talent in organizations. It is very important that leaders must feel like citizens of the world who have an expanded and well- defined vision. I strongly feel that this study on leadership excellence will benefit not only future leaders but also aspiring students pursuing an MBA course who will lead the organization in the time to come and thus be cognizant of global and local trends.

This paper will provide an insight and an approach towards usefulness and effectiveness of this trait (leadership) and how well it can be practiced though

ISSN 2076-9202

conceptual models and frameworks illustrated by various eminent leadership practitioners and authors. The premise of this paper is well depicted and highlighted in the form of this conceptual paper which seeks to present examples/ cases where leaders have shown remarkable leadership talent and entrepreneurship qualities. Leadership excellence provides a framework which automatically demarcates ordinary and extraordinary and creates broader impact on the growth of the organization. The aim is to characterize the development and analysis of Strategic Leadership qualities amongst Leaders in incubation. Leadership serves as a catalyst and is an important part of the management but it is not the whole story. Managers plan strategy, plan activities, organize appropriate structures and control resources.

A literature study highlights the new dimension to leadership development and defines its characteristics. Further it points to the need of developing leadership capacities and sustaining then by being aware of the supporting environment. Moreover the methodology adopted through this research presents different instances where employee has exhibited charismatic leadership, the study made by the earlier researchers on the leadership excellence where the approach adopted has shown results are studied and well analyzed and thus valid conclusions are drawn. Thus the study mainly focuses and is done using secondary data because the objective of this

ISSN 2076-9202

paper is to present examples/ cases thereby its impact / result on the growth, stability and sustainability of organizations.

All successful organizations has one major attribute that sets it apart from unsuccessful organizations Dynamic and effective leadership. Strategy creates a vision and every substantial organization that has had high performance standards is due to its effective strategies. If one wants superior performance then one must set high standards for sustainability. In retrospect, Leadership is the process of influencing and supporting others to work enthusiastically towards achieving objectives. It is the most critical factor that helps an individual or group identity their goals and then motivates and assists in achieving predetermined objectives. This thesis is truly devoted in fulfilling its purpose by discussing the very strategic nature of Leadership Capacities and defines the inherent characteristics, behaviors, roles and skills that combine to form the framework for sustainability. Thus leaders of today should have the potential traits of transforming organizations and coach people to make progress, lead a team like a maestro, have a leadership vision and voice, develop the look of leadership and lastly lead the transformation.

Keywords: Leadership, productivity, maestro leadership, capacities, Sustainable development, transformational leadership

ISSN 2076-9202

OBJECTIVES OF THE STUDY

- To study the ways in which leadership capacities can prove to be an approach to sustainable development and competitive advantage.
- To present an insight and a highlight on the importance of Leadership capacities in today's changing business scenario.
- This study is to equip management students at MBA level with quick practical and quintessential points on various approaches to Leadership and how it can be suitably developed to groom managers of today into transformed and charismatic leaders of tomorrow.
- To study the usefulness of Competitive Intelligence in Strategic thinking and decision making for effective leadership.

LIMITATIONS OF THE STUDY

The paper is limited to the approaches required for developing leadership capacities, hence this study is to give an insight to the management students at an MBA level as to what capabilities and competencies are required to become a successful leader.

ISSN 2076-9202

The study excludes detailed analysis on development of leadership capacities since the main purpose of this study is to highlight the importance of the subject and provide practical solutions .The boundaries are drawn to keep the study within the permissible limits thereby giving a myriad of approaches that are actually required to develop a true maestro leader.

REVIEW OF LITERATURE

Literature reviewing of the rising horizons to leadership excellence has been done to explore the approaches of leadership capacities towards sustainable business practices thereby outlining the economics of benchmarking in BOLD to the business world.

"Read and reread the campaigns of Alexander, Hannibal, Caesar, Gustavus, Turenne and Frederick. Make them your models. This is the only way to become a great general, a leader and to master the secrets of the art of war, the competition indeed"- Nick Skellon

The 21st century business leaders of today have started looking for the recognition of the employees in terms of driving and delivering sustainable business practices. Human resource is the most important element in an organization , hence in order to

foster sustainable development capabilities organizations need to have leaders who have well-defined strategies, pursue priorities relentlessly so that specific problems can be dealt with perfect replicability and increased efficiency. There have been countless mentions, assignments and theories that have been written and developed on the basis of the approaches and practices thus developed by the empirical guru's of management and specifically leadership.

When we talk about prominent theorists of leadership there are only three names that come in our minds and are indeed the leaders of the decade like Warren Bennis, Edward De Bono and Gary Hamel. They developed a number of theories that advocated sustainable business growth through development of leadership capacities through creative and lateral thinking, strategic planning, practicing Competitive Intelligence and above all having a vision, Passion and Integrity which are the major contributions and ingredients to leadership. Warren Bennis (85) is an American Scholar, Organizational consultant and an author and is considered as a pioneer in the field of leadership studies outlined leadership as a necessity in this digital world and the education in leadership prepares one for what needs to be done to maintain and develop leadership capacities and how well this trait can prove to be a strategic factor to sustainability. It is indeed very important to know the downside of leadership and assume the role of the observer who can himself offer suggestions as to how to meet

ISSN 2076-9202

the challenges and understand the very reasons as why leaders fail to bring about sustainability in organizations.

Edward De Bono (77) leading authority in the field of creative thinking and strategic leadership explained leadership as " A leader is the inventor of the concept and process of lateral thinking –a creative skill from which managers can benefit enormously". This form of lateral thinking has helped develop leadership capacities in a prudent manner and further helps to change perceptions into creation of new ideas and concepts as enablers of growth and stability. Gary Hamel (56) is regarded as the management guru of the 21st century and has been ranked as the greatest strategic thinker and the world's most influential business thinker and leader by Wall street Journal. He defined leadership as " a pioneering concept towards creating strategic intent, core competence, industry revolution and management innovation" together the mix of all these key ingredients will help in developing the leadership capacities. Larry Kahaner in his book on Competitive Intelligence explained leadership as a concept which is important as a trait to define any raiding strategy thereby outmaneuvering and outperforming competitors. He emphasized on the establishment and development of Competitive Intelligence units in every organizations and outlining the role of the leader as a catalyst to both inclusive and exclusive growth.

ISSN 2076-9202

RESEARCH METHODOLOGY

As the study is exploratory and empirical in nature therefore focus is more on the secondary data. The paper is purely conceptual in nature. The basic data has been derived from past experiences and inspired by the learning's from other theorists and authors, journals, books and websites.

INTRODUCTION

Quote: Managers are people who do things right, while leaders are people who do the right thing. — Warren Bennis, Ph.D. On Becoming a Leader.

In these uncertain and fearful times when there are so many changes happening in the business environment managers need to be proactive and assertive. Today what is more required are leaders who put their own interests at bay before the organizations well being. It is indeed a difficult task to orient managers of today, groom them to take top positions in organizations since most of the leaders commit the act of visionocide. Normally in such a circumstance the leader uses hypnotic and autocratic influence on the employees and in a manner kill people's dreams and lead them towards misdirected behavior and efforts. For effective leadership to be developed one needs to have qualities and competencies which are different and can be harbingers of sustainable human resource and continual business growth. Leaders are

ISSN 2076-9202

not only harbingers of change in organizations and the economy but also sustainable self being. We can surely take examples of Dhirubhai Ambani, Ratan Tata and Lakshmi Narayan Mittal who are no less than hallmarks of transformational leadership.

DATA ANALYSIS AND INTERPRETATION

The analysis can be done with the help of several factors or approaches mentioned below as A,B,C,D, E and F. However a case study has also been included since the paper is based on developing leadership variables how these variables have been identified and developed by successful organizations like Procter &Gamble is been depicted in the case study.

A. The art of Planning

Indeed the leader who has the right vision and a well defined strategy will be able to plan and give strategic direction to the organization. It is important to plan right from areas which require micro managing to effectively leading through people orientation just as the the musicians will work harmoniously and together only and only under the directions and gestures of the effective leader similarly in order to enable the organization function with the best synchronicity planning needs to be highly effective. Strategic planning should be done to lead and thrive in bad times, this is one

such leadership capacity which is difficult to build but one needs to exercise enough courage and apply tactics in order to convert those bad times to good times and not consider it a paralyzing agent. Certain tactics that can be used are:

1. Reallocate time to high percentage short term returns.
2. Create measures around high impact programs and projects.
3. Meet directly and frequently with work force.
4. Get in front of customers more.
5. Install innovation and improvement teams.
6. Triple communications
7. Make tough moves and lead with courage.

Source: www.linkagesinc.com/ ***Journal of Leadership Development, managerial effectiveness and organizational productivity, November 2010 issue- India edition.***

B. Change Management

In this era of constant change and with the markets fast emerging it is very essential that a leader should have qualities that project best results with this an organization is best known and its strength witnessed in an ever changing phenomenon. Infact such changes are positive for organizations to become perfect and aberrant. Today's managers should be forward looking and aggressive to locate any dysfunctional

domains which need attention like conflict management, improving on communications and problem solving.

In times of turbulent changes a manager can best exercise its leadership trait by smoothening these changes, it is important to take these tactics into consideration to deal with changes:

1. Firstly outline the dysfunctional areas which needs urgent attention and study its impact on the work place.
2. Identify areas which are severely or are worst hit by the changes.
3. Analyze the change being perceived
4. See how well the change is been understood, do people support such a change.
5. Analyze political and legal implications of changes.
6. Recruit a team of analyst to monitor and analyze such changes.
7. Resort to developing human resource through training programmes and retooling.
8. Guide areas which show resistance to change.
9. Monitor communication and feedback systems thereby keeping people well informed about any change.

ISSN 2076-9202

C. Positive Re-enforcement theory towards Leadership productivity

"I think the Army would make a serious mistake if we made a distinction and said, "You are a manager, and you are a leader." So my philosophy is that we are all leaders! We also must be responsible managers or stewards of resources entrusted to us. We would make a serious mistake to think that we could be one and not the other. — General John Wickham.

Managers just need to develop the right attitude which will enable them to develop their own leadership capacities. A lot many things are required to inject a culture of excellence through leadership in organizations. Practical tips to nurturing right leadership attitude:

- Develop clarity in your thoughts.
- Be presentable and have a good body language.
- Be a mentor and not a judge.
- Always try to find out solutions and never fume on problems. Be a problem solver.
- Be an effective and active listener.
- Be polite and humane towards employees
- Share leadership with diverse talent and practice patience.

ISSN 2076-9202

- Coach future leaders
- View technology as an integral part of your life hence be technological savvy.
- Be helpful, supportive and not hypnotic, sarcastic or even judgemental.
- Have the look of leadership by speaking with positive authority and image.
- Envision a better and brighter future, sometimes go beyond business and care for your employees, motivate them.

D. ***Practical tips to leadership that clearly develops and outlines the approaches to sustainability***

The role modeling approaches attempt to describe the leaders or CEO in terms of the different roles that they play in organizations. For instance, a leader may be considered as a :

a. The chief architect of the organizational purpose, strategist or planner.

b. The organizational leader, organizer or organizational builder

c. The chief administrator, implementer or coordinator.

d. The communicator of organizational purpose, personal Leader or mentor.

ISSN 2076-9202

The other approaches directly and indirectly attempt to describe the role of CEO's in terms of different parameters like:

1. Focus on both development and performance. Make teamwork the norm for all actions. Model teamwork in the way you conduct business and the way you interact with your colleagues.
2. Use all your leadership tools, such as coaching, counseling, mentoring, tutoring, and concentrating on improving performance.
3. Use informal processes, such as the way you communicate, showing respect, and appreciating and celebrating their achievements.
4. Your feelings must show commitment, loyalty, pride, and trust in your team.
5. Share the credit.
6. Create subcommittees for key areas and give them decision making authority.
7. Take turns having a different member facilitate or lead the meetings.
8. Talk last in discussions, after you've heard from the others.
9. Be clear about when you're expressing your own personal opinion, that of the organization, or that of the whole team.

ISSN 2076-9202

Source: ***Margerison, C. and McCann, D. (1985). How to Lead a Winning Team. MCB University Press/Seidman, D. (2007). How: Why how we do anything means everything. New Jersey: John Wiley & Sons.***

E. Development of Transformational leadership capacities through application of Competitive Intelligence

Nowadays, leaders have recognized the importance of competitive intelligence which is indeed a key to success in organizations and thus provides ongoing support to strong development and transformation of leaders in domains which are not our strengths. This method needs to be used as a tactical tool to exercise leadership through strategic decision making and practicing sustainable development practices. Competitive Intelligence according to Larry Kahaner is the most dynamic and systematic process of gathering information to further the business trends towards achieving organizational objectives. In this information age where most CEOs are stuck with using the right kind of information, making this information usable and actionable to outwit and outperform your competitors. Ideally development of leadership capacities can be a strategic factor to sustainability by taking the right move and positioning yourself as an organization by development and application of full blown Competitive Intelligence program. The exercise of leadership is mainly

recognized and focuses on decision making taking largest strategic decision to taking smallest tactical move that helps to permeate the organization.

The journey of a thousand miles to sustainability begins with a single step of building a sustainable Competitive Intelligence program. A central CI unit needs to established where the leader who is ethically and truly a Competitive Intelligence Director who exercises the very position of being a leader to exhibit before the employees the current situation and how best it can be dealt with to remove any business blindspots. It is the director, the leader and the architect of the organization to decide and determine who the key intelligence users are and where would he locate himself to design a network and move information and intelligence thereby ethically establishing the legal and ethical guidelines and rules of Competitive Intelligence.

F. Application of the approach of action logics

In today's management leadership plays a very significant role in shaping the organization and it is the leader that add value to the people and hence leaders are responsible in nurturing the right vision that can overcome all hurdles and the actualize the vision and mission of all the stakeholders in an organization. The concept has its root in Buddhist, greek, Hindu cultures. This instrument is used specifically for human development and in development of leadership capacities.

Under this special emphasis is laid on developing the leadership development framework which has its Focal point on logics derived from behaviors like:

- Opportunists
- Diplomat
- Expert
- Achiever
- Individualists
- Strategists
- Alchemists

Interpretation on the application of Action Logics

Action Logic	**Key Characteristics**	**Leadership style associated with each Action Logic**
Opportunist	Wins any way possible. Self- oriented; manipulative; "might makes right".	Short term horizon; focus on concrete things; deceptive; rejects feedback; externalizes blame; distrustful; fragile self-control; possibly hostile humor or "happy-go-lucky"; views luck as central; views rules as loss of freedom; punishes

		according to "eye for eye" ethic; treats what they can get away with as legitimate. Seeks personal advantage: takes an opportunity when it arises.
Diplomat	Avoids overt conflict. Wants to belong; obeys group norm; rarely rocks the boat.	Observes protocol; avoids inner and outer conflict; works to group standard; speaks in cliches and platitudes; conforms; feels shame if they violate norm; avoids hurting others; seeks membership and status; face-saving essential; loyalty is to immediate group, not distant organization or principles. Attends to social affairs of group and individuals. Provides supportive social glue.
Expert	Rules by logic and expertise. Searches for improvement and rational efficiency.	Is immersed in the self referential logic of their own belief system, regarding it as the only valid way of thinking. Interested in problem solving; critical of self and others based on their belief system; chooses

		efficiency over effectiveness; perfectionist; accepts feedback only from "objective" experts in their own field; dogmatic; values decisions based on the incontrovertible facts; wants to stand out and be unique as an expert; sense of obligation to wider, internally consistent moral order. Consistent in pursuit of improvement. Strong individual contributor.
Achiever	Meets strategic goals. Delivery of results by most effective means. Success focused.	Effectiveness and results oriented; long-term goals; future is vivid, inspiring; welcomes behavioral feedback; feels like initiator, not pawn; begins to appreciate complexity and systems; seeks increasing mutuality in relationships; feels guilt if does not meet own standards; blind to own shadow, to the subjectivity behind objectivity; seeks to find ways around problems in order to deliver, may be

		unorthodox. Adopts rather than creates goals.
Individualist	Innovates processes. Relativistic position with fewer fixed truths. Self, relationships and interaction with the system.	Focus on self and less on goals; increased understanding of complexity, systems operating and working through relationships; deepening personal relationships; takes on different role in different situations; increasingly questions own assumptions (part of rise in self absorption) and assumptions of others; attracted by change and difference more than by stability and similarity; increasingly aware of own shadow.
Strategist	Creates personal and organizational transformations. Links between principles, contracts, theories and judgment.	Recognizes importance of principle, contract, theory and judgment - not just rules and customs; creative at conflict resolution; process oriented as well as goal oriented; aware of paradox and contradiction; aware that what one sees

ISSN 2076-9202

		depends upon ones world view; high value on individuality, unique market niches, particular historical movements; enjoys playing a variety of roles; witty, existential humor (as contrasted to prefabricated jokes); aware of dark side of power and may be tempted by it - may misuse their own abilities and manipulate others. Post conventional.
Alchemist	Generates social transformations. Interplay of awareness, thought, action and effect. Transforming self and others.	Seeks participation in historical / spiritual transformations; creator of events which become mythical and reframe situations; anchoring in inclusive present, seeing the light and dark in situations; works with order and chaos; blends opposites, creating "positive-sum" games; exercises own attention continually; researches interplay of institution, thought, action and effects on outside world; treats time and events as

ISSN 2076-9202

		symbolic, analogical, metaphorical (not merely linear, digital, literal), involved in spiritual quest, often helps others in their life quests.

Source: Fisher, D. Rooke, D. & Torbert, W. 2003. Personal and Organizational Transformations through action inquiry. Edge/Work Press/Torbert, Bill & Associates. 2004. Action Inquiry: The Secret of Timely and Transforming Leadership. Berrett-Koehler.

Key Findings

1. Leadership skills and capacities can be developed and learned through practice and self confidence
2. Emotional intelligence is a key factor for effective leadership, hence the focal point is on effective communication
3. Systems thinking and dialogical abilities are key to deal with the current complexities
4. In order to sustain leadership effectiveness and continuous change, leaders need to renew their own energy and the one of others around them

5. In terms of organizational sustainability leadership is one of the key ingredient for contributing to its success or failure. The leader gives direction and vision to the organization.
6. This paper does not give a complete description of how leadership capacities can be developed for organizational growth and best health neither this study is a detailed study on development of leadership capacities since it just gives a highlight on how important it is as a factor, as a catalyst for inclusive growth.

CONCLUSION AND RECOMMENDATION

The paper thus concludes with the fact that leadership is indeed a remarkable trait that has potential to transform any organization from ordinary to extraordinary. To cope with the changing scenario, it is essential that leaders not only cope with these dynamic changes in the environment but also enable their team to cope with such continuous change. The main aim of presenting this paper before the audience is not to provide a direct tool for sustainability and immediate practice but to instill in the minds of the reader and create awareness that in order to win over any situation and turbulent times, it is important to lead to win.

I strongly recommend this paper to all management practitioners, executives, MBA students, instructors to who will truly benefit from this study and would understand

the significance of this trait since leaders are not in abundance and indeed are hard to find. It is indeed difficult to get the right recipe for effective leadership with all the three flavors of magnetism, vision and personality traits.

Annexure-1 CASE STUDY

Leadership Training and Development at P&G

Abstract:

The case examines the measures taken by the US based multinational consumer products company, P&G to nurture leadership at the company. It discusses in length about A G Lafley's, former CEO of P&G, efforts to develop a company-wide leadership development process, encompassing areas like selection, training and individual assessment. The case also presents the "Build-from-within" policy of the company and its efforts to combat the insularity that was thought to result from the policy. In addition, the case explains the succession planning process at P&G and the "Talent Portfolio" that contained the list of the up-coming leaders at the company

"We teach that the best leaders are those who have ambition for the organization, but not for themselves. If an individual's ambition is for himself or herself, chances are people will not want to follow them."[1]

- Robert A. McDonald, Current CEO and Former COO of P&G, in October 2008.

"Procter & Gamble epitomizes what leadership can create. When I think of this corporation, I picture the torch of leadership being passed from person to person, generation to generation, century to century." [2]

- Dennis F. Haley, Co-author of 'The Leader's Compass: A Personal Leadership Philosophy is Your Key to Success', in May 2004.

Introduction

In November 2009, US-based Procter & Gamble Company (P&G) was placed second in Fortune magazine's list of '25 Top Companies for Leaders'. Fortune, along with human resources consultants, Hewitt Associates (Hewitt), and strategic HR and leadership development advisor, the RBL Group, assessed various companies in the list on their capacity to draw, preserve, and foster talent. According to Fortune, P&G had excelled at the task of fostering leaders and had created new methods to assess its employees in the global marketplace, especially during tough economic times. Robert Gandossy, Global Practice Leader of Leadership Consulting at Hewitt, said, "Our research and experience tells us that while leadership talent is in short supply around the world, the Global Top Companies for Leaders are still able to groom a

ISSN 2076-9202

near-constant supply of world-class leaders... year after year and regardless of economic conditions. This capability gives them a unique advantage over their competitors and will poise them to emerge stronger - and more quickly - out of the economic downturn."[5] P&G, a 172-year-old multinational consumer goods company, had several renowned brands. The company had a long history of nurturing leadership. However, it was under the leadership of AG Lafley who became the CEO in June 2000 that the leadership development process at the company was streamlined.

Lafley ensured that the right people were hired, that adequate training was provided to them, and that they were then groomed into capable leaders who would in turn lead the company in the future. P&G started the process of nurturing leaders right from the recruitment process, wherein it selected candidates based on their intelligence as well as their leadership capability. At each stage of their career, the company provided training to these new recruits through a series of programs to further improve upon their leadership skills. In addition, the company placed special emphasis on inculcating values like integrity and trust in its employees and also made efforts to provide them with a diverse working experience...

Background Note

In 1837, William Procter, a candle maker, and James Gamble, a soap maker, formed a

partnership called Procter & Gamble to manufacture and sell soaps and candles. The business grew gradually over the years and by 1860, it had achieved annual sales of more than US$ 1 million...

The Entry of Lafley

By late 1999, it became evident that the restructuring exercise was a failure. Industry analysts pointed out that Jager had not only introduced expensive new products but had also mismanaged existing brands at the same time... P&G placed emphasis on developing the leadership capability of its employees. The process of identifying potential leaders at the company had commenced way back in 1947, under the auspices of the then CEO Richard "Red" Deupree who said, "If you leave us our buildings and our brands but take away our people, the company will fail...

"Values-Based" Leadership

Lafley believed that a value system that included integrity and trust were compulsory for a leader. The P&G board, Lafley, and Bill Conaty, the longtime head of HR at GE (who was hired by Lafley as a consultant in 2008), went on to develop a 10-point list of qualities that a CEO required to have...

ISSN 2076-9202

Risk of Insularity?

P&G with its management continuity and practice of promoting from within, had had only 12 CEOs in its 172-year history and all of them were insiders, including two family members. Industry observers said that most of the P&G employees had started their careers at the company, socialized solely with co-workers, and continued to stay put at the company throughout their careers...

The Interpretation & outcome

Over the decades, P&G received several accolades for its efforts to nurture leadership at the company. A G Lafley has contributed hugely to management theory and practice and has oriented employees in such a manner so that every task is done with perfection and objectives achieved with perfect replicability.

Source: www.icmrindia.org/casestudies/icmr_case_studies.htm

REFERENCES

1. Azhar Kazmi " Strategic Management & Business Policy" 3rd Edition,2008, Tata Mc Graw Hill
2. Brafman, Ori, and Rod A. Beckstrom. *The Starfish and the Spider : The Unstoppable Power of Leaderless Organizations*. New York: Portfolio, 2006.
3. Doppelt, Bob. *Leading Change toward Sustainability : A Change-Management Guide for Business, Government and Civil Society*. Sheffield: Greenleaf, 2003.

ISSN 2076-9202

4. Ferguson, Marilyn. *The Aquarian Conspiracy : Personal and Social Transformation in the 1980's*. London: Paladin Grafton, 1988.
5. Fisher, D. Rooke, D. & Torbert, W. 2003. Personal and Organizational Transformations through action inquiry. Edge/Work Press/Torbert, Bill & Associates. 2004. Action Inquiry: The Secret of Timely and Transforming Leadership. Berrett-Koehler.
6. Grandin, Temple. *Thinking in Pictures*. New York: Vintage Books, 1996.
7. Hawken, Paul. *The Ecology of Commerce : A Declaration of Sustainability*.London: Phoenix, 1995.
8. Hersey, P. & Blanchard, K. (1977). *Management of organizational behavior: Utilizing human resources*. Englewood Cliffs, NJ: Prentice-Hall.
9. Juran, J. M. (1988). *Juran's Quality Control Handbook. New York: Mcgraw-Hill.*
10. K Aswathappa " Human Resources Management" 5th Edition, 2008, Tata Mc Graw hill
11. Laszlo, Chris. Sustainable Value : How Mainstream Companies Do Well by Doing Good. Sheffield: Greenleaf Publishing, 2007.
12. McDonough, William, and Michael Braungart. Cradle to Cradle : Remaking the Way We Make Things. New York: North Point Press,2002.
13. Ricky W. Griffin " Management" 8th Edition,2005 Indian Adaption, Biztantra

Websites

14. www. nwlink.com
15. www. managementparadise.com
16. www.leadingtoday.org
17. www.linkagesinc.com
18. www.theleadershiphub.com

ISSN 2076-9202

19. www.icmrindia.org

ISSN 2076-9202

PATRONIZATION OF GLOBALIZATION IN FRAMEWORK OF OLYMPICS: A LITERATURE PERSPECTIVE

Khuram shafi [1], Amer Rajput [2*]

[1]Assistant Professor, COMSATS Institute of Information Technology
The Mall, Quaid Avenue Wah Cantt. **Pakistan**
E-mail: shafikhuram@yahoo.com

[2]Assistant Professor, COMSATS Institute of Information Technology
The Mall, Quaid Avenue Wah Cantt. **Pakistan**
&
PhD Student, Department of Management, Faculty of Management and Human Resource Development, Universiti Teknologi Malaysia, 81310 UTM Skudai, Johor, **Malaysia**
[*]**E-mail:** amerrajput@gmail.com

ABSTRACT

A considerable amount of literature has been published on globalization. These studies investigate the globalization with varying contexts. This literature review is an endeavor to investigate globalization in the context of Olympic and sports. This article defines the globalization, discusses Olympic as antecedent of globalization, and explores cultural aspect of globalization in perspective of Olympic. Furthermore, it suggests the future direct to investigate impact of globalization for cultural assimilation in perspective of Olympic.

Keywords – Globalization, culture, business, Olympics

INTRODUCTION

ISSN 2076-9202

The world is heading towards a global village due the rapid growth of technological advancement. Several factors are contributing for the globalization; whereas, Olympic is considered as one the factor. This study investigates globalization in context of Olympics because this factor is least discussed in perspective of globalization. Sophisticated production along with consumption for ever country was registered as catalyst for global business expansion successfully more than hundred years ago (Marx, Engels, & Hobsbawm, 1998). Sports are vestige above all differences of religion, politics, and culture; moreover, sports project common meaning for positive feeling and shared experience. Cosmopolitan character to production and consumption in every country can be seen with association of popular sports stars globally; product and services; and corporate logos (Smart, 2007).

Globalization has been discussed widely and some of definitions are presented in this article. While there is no need to redefine globalization; however, some widely used definition are discussed with varying contextualization for various fields of knowledge. Several scholars have defined globalization for various disciplines such as: economics and international interest rate and establishment of an environment for single currency and financial system (Scholte, 2000); moreover, globalization is defined shortly as an action at distance (Tomlinson, 1994). Mostly definitions clarify the phenomenon of globalization in a broader perspective. For

ISSN 2076-9202

instance, Held and McGrew (2007) described that "globalization as the process by which events, decisions, and activities in one part of the world can come to have significant consequences for individuals and communities in quite distant parts of the globe". Furthermore, other scholars have defined globalization in perspective of a process that "embodies a transformation in the spatial organization of social relations and transactions" (Held, McGrew, Goldblatt, & Perraton, 2000).

Some authors have considered globalization a phenomenon of the world as a whole and awareness of world as a single place (Giulianotti & Robertson, 2006). Globalization is as well as thought of the connectivity of world as a single culture and society (Held & McGrew, 2007). It is argued that globalization is to promote one culture by process of 'globalization', whereby local culture adopts the needs, customs of global culture, and beliefs; furthermore, it is described that globalization reveals the nations difference for culture (Held & McGrew, 2007). For example in sports the utilization of media among different cultures of world's nations in production techniques, camera angles; and how the viewer interpret the televised sports are different for every nation. Globalization is argued as good or bad; both types of arguments are presented in literature. The favoring arguments encompass opportunities for prosperity, peace and democracy (Hogan & Paterson, 2004). Sports are considered to promote the harmonization of cultures as well a major contributor to

spread globalization (Horne & Manzenreiter, 2006).

OLYMPIC AS ANTECEDENT OF GLOBALIZATION

China has turned Olympics' mega-event into celebration of a Chinese renaissance and harmonization of world civilizations under the slogan 'One World, One Dream' in year 2008. Nevertheless, it is recognized that world fair is valued more than amusement park and trade fair (Whitson & Macintosh, 1996). The world fair plays several implicit and explicit roles. The world fairs such as Olympics promote ideas; building of relationships among several nations; promotion of education; promotion of technological advancement all over the world; and presentation of artistic sense of the participating nations (Benedict, 1991).

The Olympic gives an opportunity to the nations to advance their image in a progressively growing market conscious as well as economically competitive world; moreover, is described about the first international exhibition that was held in Hyde Park at London in 1851 when Prince Albert said, "It was the only way to out-do the French" (Maurice, 1994). Traditionally, sports have subscribed to the belief as of practices, institutions, and ideologies that are evolved and transferred across national boundaries under an umbrella of globalization's transformative pressures (Dyreson, 2003). Olympics with use of technological advancement are bringing nations

together; bringing citizens of the world at one place; and the man in the street (Roche, 2006).

Sports are considered to be the best example of globalization as there are no national boundaries for sports (Roche, 2006) as well as Olympic serves as a great public exposure (Hill, 1996). Modern nationhood and international relations are emphasized by sporting activities (Brownell, 1995). Olympics are most significant in promoting social, economic, physical legacies. These factors impact the host nation for larger time period (Hall, 2006). Olympic is declared as mega "large-scale cultural (including commercial and sporting) events, which have a dramatic character, mass popular appeal and international significance". Roche (2006) has defined some sports' events as mega and described mega as able to transmit promotional messages to billions of people through telecommunication.

CULTURE AND GLOBALIZATION

When one athlete represents one's nation during Olympics then the athlete is presenting and promoting its culture and identity to the rest of the world (Xu, 2006). Brownell (1995) has described Olympic as the world's largest single event for the production of national culture for international consumption. Olympics provide cultural resources to reflect the identity and construction of meaningful social life of the

host country (Horne & Manzenreiter, 2006). However, mega-event merely shows off the city to rest of the world and just showing a global show to locals (Whitson & Macintosh, 1996). Olympic gives an opportunity to host nation for renewal identities as citizens of world (Horne & Manzenreiter, 2006). Olympic is paving way for assimilation of a global culture for the entire globe.

Olympic generates cultural shows which are used to be organized by host nation and ultimately it encourages hospitability. It provides ways of communication among other nations of the world (Marivoet, 2006). Political, cultural, and economic projects are implemented for the nation with association of experiences (Roche, 2006). Giulianotti & Robertson (2004) have described that during opening and closing ceremonies of Olympics, when the supporters from all over the world support their nation displaying distinct dress, music and patterns of behavior, they are actually bring their culture to the world.

Eriksen (2007) has raised another aspect of sports that the people of countries, which play a specific game, are more aware of the countries playing the same game. One can see that people of Pakistan know more about West Indians than Venezuela although both are in the same region; because Pakistan and West Indians both play cricket. Even some citizens of Pakistan are not even having the knowledge of central Asian Countries which are more nearer to Pakistan than West Indies. This is

ISSN 2076-9202

only because of the exposure of sports; therefore, Olympics provide a great deal of knowledge about the culture dissemination for the entire world. However, some scholars believe that Olympics are popularizing American culture only to the rest of the world just like Hollywood movies have a complete package of exporting American culture (Keys, 2004).

CONCLUSION

Although Olympics are spreading globalization and the economic benefits are large to a vast extent that one would wish to remove all ills of the world through staging Olympic Games. However, the economic benefits just go to few corporations. Political changes may occur with evolution of democracy by spreading Olympic because nations meet one another during the Olympic. Now firms are utilizing global brands which can have their impact on for the spread of globalization with association of Olympic all over the globe. Mostly, this objective is achieved by sponsoring of sports which have impact for promoting globalization.

Olympic strikes a cautionary note for cities about whether hosting the Olympics makes for good public policy. However, it might be simple to be seduced by possible glory, the insensitive realities of private power as well as international stage should make the public and their elected representatives think twice about pursuing Olympic.

ISSN 2076-9202

Review of literature pertaining to globalization in context of Olympic, suggests that Olympic act as antecedent of globalization with the conduct of mega-event. Moreover, Olympic in context of globalization, is promoting one culture as well as with the identification of national culture for the host country of Olympic. Future research can conducted to investigate the impact of globalization for cultural assimilation in perspective of Olympic.

REFERENCES

Benedict, B. (1991). International Exhibitions and National Identity. *Anthropology Today, 7*(3), 5-9.

Brownell, S. (1995). *Training the body for China: sports in the moral order of the People's Republic*: University of Chicago Press.

Dyreson, M. (2003). Globalizing the Nation-Making Process: Modern Sport in World History. *The International Journal of the History of Sport, 20*(1), 91-106.

Eriksen, T. H. (2007). Steps to an ecology of transnational sports. *Global Networks, 7*(2), 154-165.

Giulianotti, R., & Robertson, R. (2004). The globalization of football: a study in the glocalization of the 'serious life'. *The British Journal of Sociology, 55*(4), 545-568.

Giulianotti, R., & Robertson, R. (2006). Glocalization, Globalization and Migration. *International Sociology, 21*(2), 171-198.

Hall, C. M. (2006). Urban entrepreneurship, corporate interests and sports mega-events: the thin policies of competitiveness within the hard outcomes of neoliberalism. *The Sociological Review, 54*, 59-70.

Held, D., & McGrew, A. (2007). *Globalization/anti-globalization: beyond the great divide*: Polity.

Held, D., McGrew, A., Goldblatt, D., & Perraton, J. (2000). *The global transformations reader*: Polity Press.

Hill, C. R. (1996). *Olympic politics*: Manchester University Press.

Hogan, M. J., & Paterson, T. G. (2004). *Explaining the history of American foreign relations*: Cambridge University Press.

Horne, J., & Manzenreiter, W. (2006). An introduction to the sociology of sports mega-events. *The Sociological Review, 54*, 1-24.

Keys, B. (2004). Spreading Peace, Democracy, and Coca-Cola®. *Diplomatic History, 28*(2), 165-196.

Marivoet, S. (2006). Part 3 Sports Mega-Events, Power, Spectacle and the City: UEFA Euro 2004TM Portugal: The social construction of a sports mega-event and spectacle. *The Sociological Review, 54*, 125-143.

Marx, K., Engels, F., & Hobsbawm, E. J. (1998). *The Communist manifesto: a modern edition*: Verso.

Maurice, R. (1994). Mega-events and urban policy. *Annals of Tourism Research, 21*(1), 1-19.

Roche, M. (2006). Part 1 Sports Mega-Events, Modernity and Capitalist Economies: Mega-events and modernity revisited: globalization and the case of the Olympics. *The Sociological Review, 54*, 25-40.

Scholte, J. A. (2000). *Globalization: a critical introduction*: St. Martin's Press.

Smart, B. (2007). Not playing around: global capitalism, modern sport and consumer culture. *Global Networks, 7*(2), 113-134.

Tomlinson, J. (1994). A Phenomenology of Globalization? Giddens on Global Modernity. *European Journal of Communication*, *9*(2), 149-172.

Whitson, D., & Macintosh, D. (1996). The global circus: International sport, tourism, and the marketing of cities. *Journal of Sport & Social Issues, 20*(3), 278-295.

Xu, X. (2006). Modernizing China in the Olympic spotlight: China's national identity and the 2008 Beijing Olympiad. *The Sociological Review, 54*, 90-107.

SCANNING THE BUSINESS ENVIRONMENT AND ITS IMPLICATIONS ON ORGANISATIONAL PERFORMANCE: A CASE STUDY

OLU OJO
DEPARTMENT OF BUSINESS ADMINISTRATION
OSUN STATE UNIVERSITY
P. M. B. 2008, OKUKU
OSUN STATE, NIGEERIA
TEL: +2348034943925
E-MAIL: oluojoe@yahoo.com

D. O. ABDUSALAM
DEPARTMENT OF BUSINESS ADMINISTRATION
FACULTY OF MANAGEMENT SCIENCES
USMANU DANFODIYO UNIVERSITY
P. M. B. 2346, SOKOTO
SOKOTO STATE, NIGERIA
TEL. +2348035073549
E-MAIL: daomoyi@yahoo.co.uk

ABSTRACT

This article investigates the effect of strategic environmental scanning on organisational performance. We try to ascertain if strategic environmental scanning has significant relationship between environmental scanning and organisational performance and to examine whether the use of environmental scanning enables an organisation in seizing opportunities and avoiding threats existing in the external environment and to formulate recommendations regarding environmental scanning and organisational performance. The study adopted survey research design method with the administration of questionnaire as instrument of data collection. The case study companies were selected through stratified and simple random sampling

ISSN 2076-9202

techniques; while our respondents were selected by using simple random sampling technique. Analysis of data was done using descriptive statistics with the aid of Statistical Package for Social Sciences. Simple linear regression and coefficient of correlation analysis were used in testing our hypotheses. This study found that there is significant relationship between environmental scanning and organisation performance and that the use of environmental scanning in evaluating the environmental forces has help in seizing the opportunities and avoiding threats and it leads to organisation performance and profitability. Thus, we recommend that since environment is an indispensable tool in management, it should not be taken with kids' glove as it influences the organisation in achieving its stipulated objectives from time to time and that managers should keep abreast of the developments and changes in the organisation environment and manage such changes and developments appropriately.

Key Words: Business environment, Environmental scanning, Organisational performance, Business Organisations.

INTRODUCTION

In today business environment, competition is the order of the day. Business organisations are operating in environment characterised dynamism, complexity and uncertainty. This means that organisations should be constantly scanning their environment to be abreast of the events unfolding in their domain. Organisations can use environmental scanning to determine whether or not to enter new market and also to know the present situation or condition of its environment. Its purpose is to identify strategic factors- external and internal elements that will determine the future of the organisation. The external environments consist of variables like opportunities and threats that are outside the organisation and not typically within the short-run control

of the top management. The management of any organisation has little or no influence on the external environment.

The importance of environmental analysis lies in its usefulness for evaluating the present strategy, setting strategic objectives, and formulating future strategies. The fortunes of business enterprise are known to have been determined by changes in the social, economic, political, technological, business and industrial conditions (Rouibah and Ould-Ali, 2002). It is therefore pertinent that a thorough and careful analysis be carried out on these factors. A number of studies have been conducted on the subject of environmental scanning and corporate performance. Research on environmental scanning first appeared in the 1960s with the studies by Aguilar (1967) and Keegan (1978) have found that managers who perceive greater environmental uncertainty tend to do more scanning. Other researchers have conducted researches on environmental scanning and other variables (Nishi et al., 1982; Daft et al., 1988; Lester and Waters, 1989 Choo and Auster, 1993; Freeman, 1999; Groom and David, 2001; and Rouibah and Ould-Ali 2002). Miller, (1994) carried out analysis on eighty-one detailed case studies of successful and failing businesses. The study found that environmental scanning was by far the most important factor in separating the successful companies from the unsuccessful, that this, it accounted for more than half of the observed variance. Newgren et al. (1984) compared the economic performance of twenty-eight corporations that practiced environmental scanning with twenty-two non-practicing firms. They measured performance over a period of five-year (1975-1980) using the firm's share price/earning ratio, normalised by industry. The results showed that scanning firms significantly outperformed non-scanning firms. The average annual performance of the scanning firms was also consistently better than the non-scanning firms throughout the period. The study concluded that environmental scanning and

ISSN 2076-9202

assessment has a positive influence on corporate performance.

From the foregoing, it is obvious that many organisations regard environmental scanning as a potentially beneficial way of running an organisation. However, the extent to which Nigerian manufacturing companies regard environmental scanning and the performance impact of practicing it have not received adequate research attention. Besides, most of the studies on environmental scanning that have been reported were carried out in industrialised countries. This implies that there is a major dearth of relevant literature on Third World countries, including Nigeria, which has to be covered by research. Even the one that was conducted in Nigeria was based on banking industry and transport sector (Ojo, 2008; Ugboaja, 2002). The study attempts to examine the impact of environmental scanning on corporate performance in the manufacturing industry. Thus, it is hoped that this study will add new information to the present state of knowledge in the field and this will be of assistance to academics and other researchers in this field and other related research areas. Moreover, this study will also be of immense benefits to practicing managers who might be willing to consider this approach in managing their organisations.

In is against this backdrop that this study addresses the following research questions (i) How do the strategic environmental analysis increase the level of organisation performance? (ii) How do organisations use environmental scanning to seize opportunities and avoiding threats existing in the external environment?

Hypotheses are also proffered and tested in order to know how much knowledge the organisation have about their environment and to know if there is any relationship between environmental scanning and organisation performance in the manufacturing industry operating in Nigeria.

As a way of managing an organisation strategically, the managers have to keep abreast

of everything about his environment (internal and external) for the purpose of achieving the organisation goals and objectives. It is the fundamental decision about the future direction of an organisation, its purpose, its resources and how it interacts with the world in which it operates.

LITERATURE REVIEW

Business managers must realise that they are operating in a given environment. Thus, they must take into account the influence of the environmental forces that can affect the performance of their organisations. They must have sufficient knowledge to be able to identify, evaluate and cope with environmental forces that may affect the operations of their organisations. Therefore, any manager that wants to succeed must be mindful of the organisation's environment, both internal and external (Ojo, 2007).

All businessmen operate within an environment and every business organisation operates in an environment that transcends its official boundaries. The environment of business is a highly dynamic, complex, and competitive one. The forces a business is to contend with are varied as they are continually changing (Ojo, 2008).

An environment can be defined as the interrelated and interdependent forces and conditions within and outside the organisation that affect the business in its day-to-day activities. The business environment is a highly dynamic one and the forces a business has to contend with are as varied as they are continually changing. Thus managers must take into account the influence of the environmental forces that can affect the performance of their organisations. They must have sufficient knowledge to be able to identify, evaluate and cope with environmental forces that may affect the operations of their organisations. A thorough understanding and analysis of the business environment by the businessman will enable the business to cope adequately with the changing forces within the environment.

Business environment can be divided into two major ways: the external environment and the internal environment. The external environment refers to all relevant forces and conditions outside the business boundaries that affect its activities. The internal

environment on the other hand consists of all forces and conditions within the business that influence its activities. The external environment can be divided into two broad groups for proper analysis. These are the general environment and the task environment.

Characteristics of the Organisational Environment

When we examine the elements of organisational environments carefully, it is discovered that these environments create a complex set of conditions for any particular organisation. Although the specifics vary from one organisation to the other, the characteristics of the environment can be broadly described in terms of its dynamism, complexity, uncertainty and munificence (Ojo, 2009)..

1. Dynamism: Environmental dynamism refers to the rate and predictability at which the elements of an organisation's environment are changing. Environmental dynamism can be divided into two major groups: stable and unstable environments. Organisation's environment is said to be stable when the rate of change is slow and it's relatively predictable. On the other hand, environments in which the rate of change is fast and it's relatively unpredictable are said to be unstable. The greater the elements of the environment become more unstable, the greater the challenges they present to the businessman. Thus, environmental dynamism requires managers to continually keep abreast of what is happening by studying the organisation's environment as an important ongoing process, not a one-time task.

2. Complexity: This term "environmental complexity" simply refers to the number of elements in an organisation's environment and their degree of similarity or segmentation. The greater the environment contains many different forces, the more complex the environment is. Environment in which there are relatively small number

of similar elements are said to be homogeneous or simple. Conversely, environments with a large number of dissimilar or segmented elements are referred to as heterogeneous or complex. The more the elements in the environment become heterogeneous, the more the variables the managers will have to contend with.

3. Uncertainty: According to Pfeffer and Salancik (1978), environmental uncertainty is a condition in which future environmental circumstances affecting an organisation cannot be accurately assessed and predicted. The degree of environmental uncertainty is a function of two major factors – complexity and dynamism. The more an environment is dynamic and complex, the more its future is uncertain.

Every organisation faces some level of uncertainty. The more uncertain an organisation's environment is the more strenuous for managers in monitoring it, assessing the implications for the organisation and deciding what actions to take at present and in future.

Environmental uncertainty increases information processing within organization because managers must identify opportunities, detect threats, interpret problem areas and implement strategic or structural adaptation (Hambrick, 1982).

4. Munificence: Environmental munificence can be defined as the degree to which the environment supports sustained growth and stability by making resources available to an organisation. In the words of Castrogiovanni (1991), environmental munificence can range from relatively rich to relatively lean, depending on the level of resources that are available to the organisation within the environment.

ISSN 2076-9202

Organisations that are able to operate in rich environments usually built up a cushion of internal resources. Unfortunately, rich environments eventually tend to attract other organisations which will ultimately lead to inter-organisational rivalry. In spite of that, managers should look for and capitalise on the aspects of the environment that are likely to support the organisation's activities.

Environmental Scanning

This involves monitoring and evaluating changes and trends in the environment. It deals with searching out information about the environment that is not available to most people. This can be done through analysis of current competitors, nature of entrance into the industry, bargaining power of key players and so on. Outcomes from this analysis lead to competitive intelligence. Environmental scanning is the monitoring, evaluating, and disseminating of information from the external and internal environment to key people within the corporation or organisation. (Kazmi, 2008).

Environmental scanning is a process of gathering, analysing, and dispensing information for tactical or strategic purposes. The environmental scanning process entails obtaining both factual and subjective information on the business environments in which a company is operating or considering entering. Environmental scanning involves surveillance of a firm's external environment to predict environmental changes to come and detect changes already under way. Successful environmental scanning alerts the organisation to critical trends and events before the changes have developed a discernible pattern and before competitors recognise them. Otherwise, the firm may be forced into a reactive mode instead of being proactive.

Before an organisation can begin strategy formulation, it must scan its environment for strengths and weaknesses. Strategic managers view environmental scanning as a

prerequisite for formulating effective business strategies (Beal, 2000). Environmental scanning includes both looking at information (viewing) and looking for information (searching) (Benczúr, 2005). As leaders, strategic managers are challenged to anticipate changes in the environment and be flexible enough to adjust strategies to creatively seek out new opportunities. Applying the process of environmental scanning creates the opportunity to weave together the past, present, and future change (Mason, 2001). A corporation uses this tool to avoid strategic surprise and to ensure its long-term health. It is against this background, the researcher believes that there is a positive relationship between environmental scanning and corporate performance.

Coates (1985) identified the following objectives of an environmental scanning system:

• detecting scientific, technical, economic, social, and political trends and events important to the institution;

• defining the potential threats, opportunities, or changes for the institution implied by those trends and events;

• promoting a future orientation in the thinking of management and staff, and

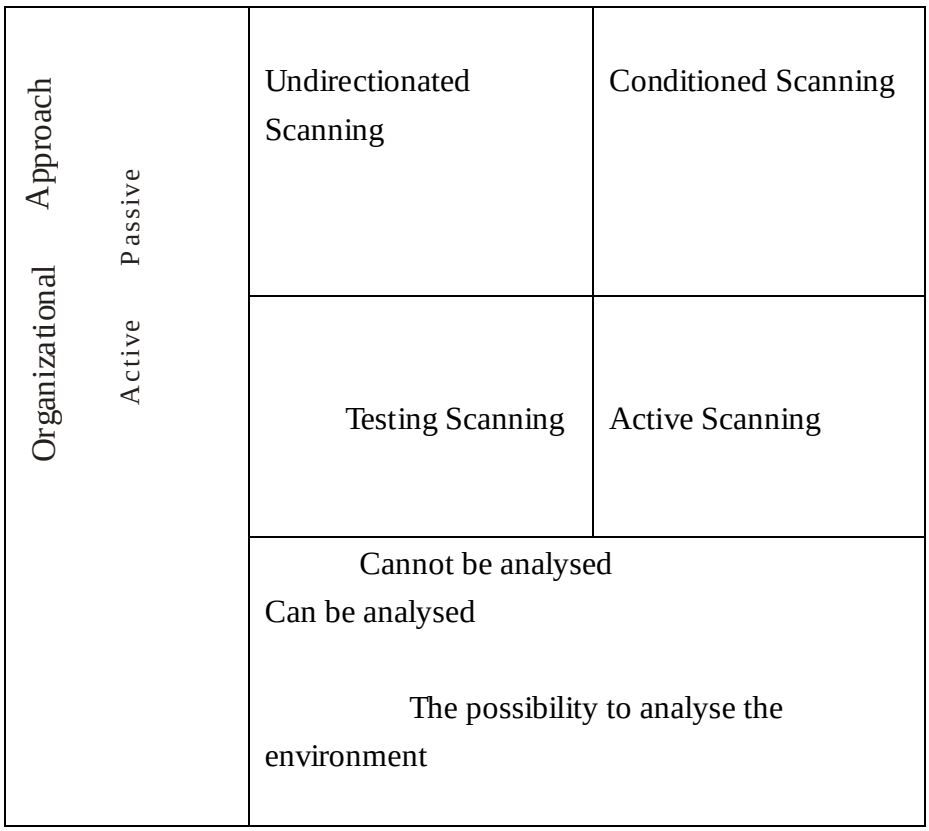
• alerting management and staff to trends that are converging, diverging, speeding up, slowing down, or interacting.

Fahey and Naravanan (1986) suggest that an effective environmental scanning program should enable decision makers to understand current and potential changes taking place in their institutions' external environments. Scanning provides strategic intelligence useful in determining organisational strategies. The consequences of this activity include fostering an understanding of the effects of change on organisations,

aiding in forecasting, and bringing expectations of change to bear on decision making.

Beginning from the analysis of the possibility to analyse the environment and organisational involvement, we can elaborate a matrix model of environmental as shown in the figure below:

Figure 1: A Model for Environmental Scanning



Source: Adapted from C. W. Choo, 2001

Undirectionated scanning exists when the manager perceives the environment to be difficult to analyse, therefore it doesn't interact with the environment for understanding it. Information need is slightly defined and unclear but a great part of information is getting from accidental actions. While the environment is considered hard to analyse the organisation is satisfied with few information and it doesn't want to obtain more information. The fact that enterprise doesn't allocate resources for the

environment scanning represent an advantage of undirectionated scanning, but the enterprise can be caught off guard. Environment conditioned scanning comes into being when manager considers the environment being analysable but he has passive attitude concerning the information getting and influence of the environment. Information need consists of a little number of elements, considered the most interesting for the firm. Searching information becomes standard on the basis of internal and external sources. In this case, the examination is limited because it refers to searching documents, reports, publications and informational systems which appeared over the years. Conditioned scanning activity comes into being when the firm uses the necessary information considered to be important in the environment. Structure procedures of the scanning activity can be an advantage but sometimes this standard can't detect new technology and life style (Choo 2001).

Testing scanning is achieved when the manager considers environment being less analysable or difficult to analyse. However, a manager has an active attitude with a view to influence events and results. It requires strong actions and best firm positions. Information is searched from channels created by the organisation. Information is obtained in the following way: the firms launch a new type of behavior and after it they follow what happens. Therefore information analysis is made by acting. Information analysis depends on the person ability and talent - person who make the analysis (Choo 2001).

Active scanning exists when the manager considers the environment being analysable and interacts with it for obtaining precise information. Searching objectives are detailed, specific and wide enough. The manager is ready for the new discoveries in the organisation's environment. The manager is looking for the actual and precise information which often time can be obtained from market studies. There are many differences between active and conditioned scanning. Searching information

ISSN 2076-9202

concerning conditioned scanning is reduced to some routine subjects based on previous results. On the other hand, in active scanning searching is detailed and there is based on a continuous improvement knowledge process. In a complex environment of the present-day society the organisations must manage the dilemma: first, the firm environment is less analysable because its density and fast installment of changing. Second, the organisations are aware that they must be proactive and flexible in order to adapt to the environment and influence it.

RESEARCH METHODOLOGY

This section discusses concisely the methods and procedures employed by the researcher in conducting this research. The research design used in this study is the survey research design. This means that all sampled subjects and the variables that are being studied are simply being observed as they are without making any attempt to control or manipulate them (Ojo, 2003). The population of this research study consists of all management staff of all food manufacturing companies operating in Nigeria. Owing to the widespread of network of these food manufacturing companies, it is therefore impossible to conduct this study using the whole population. The study is therefore restricted to Lagos State, the economic and commercial capital of Nigeria and Ogun State. More than 75% of food manufacturing companies in Nigeria are concentrated in Lagos and Ogun States. The following companies were randomly selected for the study: Nestle Nigeria Plc, Cadbury Nigeria Plc, UAC Foods Plc, and Freshland Foods WAMCO Nigeria Plc. From the various offices of these companies, 152 management staff was selected using simple random probability sampling method. Primary data were collected through structured questionnaire that were completed by selected sampled elements. Of the 152 copies of the questionnaire distributed to these respondents, only 120 of them were adequately filled and were used for analysis. This

gives us 78.9% response rate. To ensure the validity of the research instrument for this study, content validity which deals with item validity and sampling validity is used to ensure adequate by the instrument of the scope implied by the subject of study. In addition, experts in the field also helped in the evaluation of the question items of the instrument and adequacy of the sampled elements of the population by the measuring instrument used. The test-retest reliability was used to check the degree of consistency of the instrument. This was done by distributing questionnaires on two different occasions to determine the level of consistency. The results obtained were not the same but highly correlated which implies that the research instrument is reliable for the research work. Data collected through the questionnaire were analysed using descriptive statistics such as total score and percentage while inferential statistics was used to proof the level of significance in testing stated hypotheses.

DATA PRESENTATION AND ANALYSIS

This section focused on the presentation, analysis and interpretation data collected with the aid of structure questionnaire.

The table below gives the summary of the rate of return of questionnaire and participation level of the respondents.

Table 1: Respondents' Response Rate

Questionnaires	Number of Respondents	Percentage (%)
Returned	120	78.9
Non- Returned	32	21.1
Total	**152**	**100**

Source: Field Survey, 2010.

A total of 152 copies of the questionnaires were administered to selected respondents. Of these, 120 copies (i.e. 78.9%) were adequately filled, returned and used in this

analysis while 32 copies of the questionnaires representing 21.1% were not returned. The return rate indicates that majority of the respondents cooperated in the process of data gathering.

Table 2: Environmental Scanning is Responsible for Effective Performance of your Organisation.

Response	**Frequency**	**Percentage (%)**
Strongly Agree	40	33.3
Agree	38	31.7
Undecided	22	18.3
Disagree	12	10.0
Strongly Disagree	8	6.7
Total	**120**	**100**

Source: Field Survey, 2010.

From table 2 above, the responses presented reveal that 33.3% of the respondents strongly agree that environmental scanning is responsible for effective performance of their organisations, 31.7% agree to the statement, 18.3% were undecided, 10% disagree while the remaining 6.7% strongly disagree. From the above we can infer environmental scanning is responsible for effective performance organisations.

Table 3: There is Correlation between External Environmental Forces and Organisation Performance.

Response	**Frequency**	**Percentage (%)**
Strongly Agree	37	30.8
Agree	47	39.2

Undecided	19	15.8
Disagree	14	11.7
Strongly Disagree	3	2.5
Total	**120**	**100**

Source: Field Survey, 2010.

The above shows that 30.8% of the respondents strongly agree that there is correlation between external environmental forces and organisation's performance. 39.2% of the respondents agree to the statement, 15.8% of the respondents were undecided about the statement, 11.7% of the respondents disagree with the statement and only 2.5% of the respondents strongly disagree with the statement. Therefore, from the respondents' feedback, the conclusion that can be drawn here is that external environmental forces correlate with organisational performance.

Table 4: There is Significant Relationship between Good Working Environment and Employee Performance.

Response	**Frequency**	**Percentage (%)**
Strongly Agree	46	38.3
Agree	53	44.2
Undecided	9	7.5
Disagree	8	6.7
Strongly Disagree	4	3.3
Total	**120**	**100**

Source: Field Survey, 2010.

The above table indicates that 38.3% of the respondents strongly agree that there is significant relationship between good working environment and employee performance. 44.2% of the respondents agree to this statement, 7.5% of the

respondents were undecided about this statement, 6.7% of the respondents disagree about the statement and 3.3% of the respondents strongly disagree with the statement. The implication of the above is that there is significant relationship between good working environment and employee performance which will translate to overall organisational performance.

Table 5: Scanning the Business Environment has Effect on your Company's Performance.

Response	**Frequency**	**Percentage (%)**
Strongly Agree	33	27.5
Agree	54	45.0
Undecided	12	10.0
Disagree	16	13.3
Strongly Disagree	5	4.2
Total	**120**	**100**

Source: Field Survey, 2011.

Table 5 above shows that 27.5% of the respondents strongly agree that scanning the business environment has effect on the company's performance. 45% of the respondents agree to this statement, 10% of the respondents were undecided about the statement, 13.3% of the respondents disagree and 4.2% of the respondents strongly disagree with the statement that scanning the business environment has effect on the organisation's performance. Therefore, this means that the external environmental force has effect on the organisation performance. And as such, the use of strategic environmental scanning in evaluating the environmental forces (both opportunities and threats) has help in seizing the opportunities and avoiding threats can lead to

improved organisational performance and profitability.

HYPOTHSES TESTING AND DISCUSSION OF RESULTS

Hypothesis 1

Ho: There is no significant relationship between environmental scanning and organisation performance.

H1: There is significant relationship between environmental scanning and organisation performance.

Null Hypothesis (Ho)	T-cal	T-tab	Df	Decision
There is no significant relationship between environmental scanning and organisation performance.	7.47	2.35	0.05	Reject Ho

Decision Rule: The decision rule here is to reject Ho if T-calculated is greater than T-table (i. e. t-cal > t-tab). Therefore, the above table depicts the t-calculated to be 7.47 while the t-table is 2.35. This shows that there is significant relationship between environmental scanning and organisation performance. Our null hypothesis is therefore rejected and our alternative hypothesis is accepted. Also, the coefficient of determination (R^2) is 0.973. It shows that 93% of the variation or change in effective organisation performance is caused by variation in environmental scanning. When the remaining 7% unexplained variation is due to other variables outside the regression model.

Hypothesis 2

Ho: The use of environmental scanning will not enable an organisation in seizing opportunities and avoiding threats existing in the external environment.

H1: The use of environmental scanning will enable an organisation in seizing

opportunities and avoiding threats existing in the external environment.

Null Hypothesis (Ho)	**T-cal**	**T-tab**	**Df**	**Decision**
The use of environmental scanning will not enable an organisation in seizing opportunities and avoiding threats existing in the external environment.	9.87	2.35	0.05	Reject Ho

Decision Rule: The decision rule here is to reject Ho if T-calculated is greater than T-table (i.e. t-cal > t-tab). From the above table, our t-calculated is 9.87 while the t-table is 2.35. This shows that the use of environmental scanning in evaluating the environmental forces has help in seizing the opportunities and avoiding threats and it leads to organisation performance and profitability. We therefore reject the null hypothesis and the alternative hypothesis is thereby accepted. Also, the coefficient of determination (R^2) is 0.943. It shows that 96% of the variation or change in organisation performance is caused by variation in the external environmental. When the remaining 4% unexplained variation is due to other variables outside the regression model.

From the above analysis, it was discovered that:

1. Proper scanning of the business environment is performance driven which is supported by respondents' feedbacks to whether environmental scanning accelerates and reinforces employees' effectiveness and productivity. Thus, organisations' management should pay adequate attention to scanning the business environment as this usually leads to positive organisation performance.

2. There is a significant relationship between good working environment and employees' performance. In other words, when the atmospheric condition of the working environment is conducive, this promotes employees' commitment,

encourages participation and reinforces their effectiveness and productivity.

3. There is correlation between external environmental forces and organisational performance. When the external environment forces present opportunities, the organisation performs very well. On the other hand, whenever the external environmental forces present threats, this will curtail the performance of the organisation to some extent.

4. Environmental scanning is responsible for effective performance of the organisation. Thus, every good manager must take the duty of scanning the business environment with all seriousness as this will tell on the performance of the organisation.

CONCLUSION

In this study, the research examines the effect of scanning the business environment and its implications on organisation performance with evidence from Nigerian food manufacturing companies. Questionnaires were administered to respondents who were randomly selected from the study population to find out their opinions and views on whether environmental scanning as implication on organisation's performance.

Judging from the various computations, analyses and findings resulting from data collected for this study, the result revealed some important facts which our conclusions are based on. The first thing that can be deduced from this study is that environmental scanning is very important in every business organisation and it has implications on organisation performance. In addition, good working environment affect the level of employees' commitment to corporate goals in a positive way. The study also reveals that there is correlation between external environmental forces and organisation performance. Besides, environmental scanning is responsible for effective performance of the organisation.

ISSN 2076-9202

Considering the high percentage of respondents in favour of the two alternative hypotheses, we can deduce that scanning the business environment has a lot of implications for corporate performance. This research has been able to describe and evaluate the implications of various dimensions of environmental scanning on corporate performance and to explain why some organisations outperform others. Thus, if management can strategically and periodically scan the business environment and pay adequate attention to the threats and opportunities in the environment, the level of performance of such organisation will be high in all ramifications.

RECOMMENDATIONS

In the light of this study, the data analysed and hypotheses tested, concerning the implications of environmental scanning on corporate performance, the following recommendations are hereby made for Nigerian food manufacturing companies.

1. Since environment is an indispensable tool in management, it should not be taken with kids' glove as it influences the organisation in achieving its stipulated objectives from time to time.

2. Managers should keep abreast of the developments and changes in the organisation environment and manage such changes and developments appropriately.

3. Problems encountered during environmental scanning should be dealt with before it escalates and affects the performance of the organisation negatively.

4. The management of the organisation should continue to take environmental forces (both internal and external) seriously as a way of controlling and minimising negative effects of the instability of the environment.

ISSN 2076-9202

REFERENCES

Aguilar, F.J. (1967). *Scanning the Business Environment*. New York: McMillan.

Beal, R. M. (2000). *Competing Effectively: Environment Scanning, Competitive Strategy and Organisational Performance*.

Benczúr, D. (2005). E*nvironmental Scanning: How Developed is Information Acquisition in Western European Companies?* Information Research, 11(1) Paper 241.

Castrogiovanni, G. J. (1991) "Environmental Munificence: A Theoretical Assessment, *Academy of Management Review,* Vol. 16, Pp. 542 – 565.

Choo, C. W. (2001). *Environmental Scanning Information Seeking and Organisational Learning*, Information Research, Vol. 7, No.1.

Choo, C. W. and Auster, E. (1993). Scanning the Business Environment: Acquisition and Use of Information by Managers. In M. E. Williams (Ed.), *Annals of Information Science and Technology,* Medford: Learned Information, Inc. For the American Society for Information Science.

Coates, J. F. (1985). Scenarios part two. Alternative Futures. In J. S. Mendell (Ed.) Nonetrapolative Methods in Business Forecasting. Newport: Qurom Books.

Daft, R. L., Sormunen, J. and Parks D. (1988). Chief Executive Scanning, Environmental Characteristics and Company Performance: An Empirical Study, *Strategic Management Journal,* 9(2), 123-139.

Fahey, L., Narayanan, V. K. (1986). *Macroenvironmental Analysis for Strategic Management*. St. Paul, MN: West.

Freeman, O. (1999). Competitor Intelligence: Information or Intelligence. *Business Information Review,* 16(2), June, 71-77.

Groom, J. R. and David, F. R. (2001). Competitive Intelligence Activity among Small Firms. SAM *Advanced Management Journal,* winter, 12-20.

Hambrick, D. C. (1982). Environmental Scanning and Organizational Strategy, *Strategic Management Journal,* 3 (2), 159-174.

Kazmi, A. (2008). *Strategic Management and Business Policy,* 3rd ed., New Delhi: Tata McGraw-Hill Publishing Company Limited.

Keegan, W. J. (1968). The Acquisition of Global Information. *Information Management Review,* 8(1), 54-56.

Lester, R. and Waters, J. (1989). *Environmental Scanning and Business Strategy.* London: British Library, Research and Development Department.

Mason, M. (2001). *An Eye Toward the Future,* Association Management, 53 (1), 89-92.

Miller, J. P. (1994) *The Relationship Between Organisational Culture and Environmental Scanning: A Case Study,* Library Trends, no. 2: 170-205.

Newgren, K. E., Rasher, A. A. and LaRoe, M. E. (1984). An Empirical Investigation of the Relationship Between Environmental Assessment and Corporate Performance, *Academy of Management*.

Nishi, K., Schoderbek, C. and Schoderbek, P. P. (1982). Scanning the Organisational Environment: Some Empirical Results. Human systems Management, 3(4), 233-245.

Pfeffer, J. and Salancik, G. (1978) *The External Control of Organizations,* New York: Harper and Row.

Rouibah, K. and Ould-Ali, S. (2002). PUZZLE: A Concept and Prototype for Linking Business Intelligence to Business Strategy. *Journal of Strategic Information System,* 11(2), 111-130.

Ugboaja, P. C. (2002) S*canning the Nigeria's Transport Environment: A Strategic Management Approach*, Inter-World Journal of Management and Development Studies. Vol.1. No.; 1 p: 118-138.

A Critical Analysis of Weak Form Efficiency in Indian Stock Market

Dr. Ambuj Gupta
Assistant Professor
Asia Pacific Institute of Management
New Delhi
gupta.ambuj@gmail.com

Abstract

The behavior of stock returns has been extensively debated over the past few years. Researchers have examined the efficient market hypothesis and random walk characterization of returns. The validation of random walk implies that market is efficient and current prices 'fully reflect' available information and hence there is no scope for any investor to make abnormal profits. The present study addresses this issue in the context of Indian stock markets. The result of the study indicates that the Indian stock markets are 'efficient' and follow 'random-walk'.

Keywords

Random walk, weak-form efficiency, stock prices, India,

Introduction

Since the liberalization process started in 1991, Indian stock market has grown tremendously and has substantially aligned itself with the international order. Over the last 20 years, the following developments have made the Indian stock markets at par with the global markets:

- Screen-based trading systems have replaced the conventional open outcry system of trading and now, everyone acclaims the contribution of the screen-based trading in developing the culture of equity investing in India.

- The replacement of the fourteen-day account period settlement system gave way to rolling settlements on T+2 has brought down the settlement time and risk involved, to a substantial extent.

- Dematerialization of securities and demutualization of exchanges have further given impetus to smooth and reliable process of stock trading.

ISSN 2076-9202

- Derivatives' trading has added another dimension in the success story of stock markets in India.

The growth of Indian stock market can be well understood with the following figures:

TABLE 1

GROWTH OF INDIAN STOCK MARKET

CAPITAL MARKET SEGMENT (NSE)		
Parameter	**Date**	**Magnitude**
Number of trades	May 19,2009	11,260,392
Traded Quantity	May 19,2009	19,225.95 lakh
Turnover	May 10,2009	40,151.91 cr.(US $ 8,894.97 mn.)
Market Capitalization	January 07,2008	6,745,724.00 cr. (US $ 1,687,696.77 mn.)

Source: NSE Fact book 2010 (www.nseindia.com)

Despite spectacular growth in terms of the market capitalization, turnover, traded quantity and number of trades, the process of growth has been shrouded with frequent news in the media of stock scams, cases of price rigging and insider trading leading to the extreme volatility of the market. This puzzles the common investors who finds it difficult to comprehend the market and whose confidence in the market shatters again and again. This brings forth the question of efficiency of the stock markets in India. Stock markets are essentially though of capital resources allocator and their presence in the economy is supposed to provide optimum allocation of capital resources with the sole motive of economic growth and development. If the efficiency of stock markets is lost, the possibility of earning abnormal profits by adopting certain strategies may assume greater importance which may hamper the justification of the primary role of the stock market and is not good for any economy.

Objective of the Study

The present study aims to study the weak-form efficiency of the Indian stock market.

ISSN 2076-9202

The weak-efficiency of the stock market proves a random walk. Hence, it curbs down any possibility of making extra ordinary profits by predicting the patters of change in stock prices**.**

Literature Review

There is wide literature available on random walk theory and market efficiency hypothesis. Perhaps, Bachelier (1900) is the first who theorized the concept of market efficiency. The seminal works of Samuelson (1965) and Fama (1965, 1970) triggered keen interest in this area. Samuelson (1965), Fama (1965) and Jennergeen and Korsvold (1974) examined the behaviour of stock returns by applying serial correlation tests and they found markets as efficient.

Kim, Nelson & Startz (1991) examined the random walk process of stock prices by using weekly and monthly returns in five Pacific-Basin stock markets. They concluded that the mean reversion was only a phenomenon of the pre-World War II period, and not a feature of the post-war period. They found that the variance ratio tests produced positive serial correlation.

Ayadi and Pyun (1994) showed that the South Korean market doesn't follow random walk when tested under homoscedastic error term assumption and follows random walk when the test statistic is corrected for heteroscedasticity.

Grieb and Reyes (1999) employed variance ratio test on weekly stock returns to re-examine the Brazilian and Mexican stock markets. The findings indicated non-random behavior in the Mexican market while the Brazilian market indicated evidence in favor of the random walk. Ming,

Alam et al. (1999) tested the random walk hypothesis for Bangladesh, Hong Kong, Sri Lanka and Taiwan. They found that all the stock indices except the Sri Lankan stock index follow a random walk.

Magnusson and Wydick (2000) tested the random walk hypothesis for a group of African countries and find that there is greater support for the African stock markets than for other emerging stock markets.

Chian et al. (2000) analyzed stock returns for a group of Asian economies and found that most markets exhibit an autoregressive process rejecting weak form efficiency.

Nor and Guru (2000) showed multiple various ratio tests reject random walk for Kuala Lumpur Stock Exchange. They further showed that trading rules like variable length moving average (VMA) and fixed length moving average (FMA) have predictive ability of earning profits over and above the transaction costs.

Darrat and Zhong (2000) examined random walk hypothesis for the two newly created stock exchanges in China. They followed two different approaches, namely-the various ratio tests and the NAÏVE Model (based on assumption of random walk) with other models like ARIMA and GARCH. They rejected the existence of random walk in newly created Chinese stock exchanges using both the methodologies. They further suggested artificial neural network (ANN) based models as strong tools for predicting prices in the stock exchanges of developing countries.

Smith et al (2002) reported auto correlation in returns of Botswana, Egypt, Kenya, Mauritius, Morocco, Nigeria and Zimbabwe. The study found empirical evidence in support of random walk only in case of South Africa. Further, Segot and Lucey (2005) confirmed random walk in Israel and Turkey.

Narayan et al. (2004) examined the linkages between the stock markets of Bangladesh, India, Pakistan and Sri Lanka using a Granger causality approach among the stock price indices within a multivariate co-integration framework. They found that in the long run, stock prices in Bangladesh, India and Sri Lanka Granger-cause stock prices in Pakistan while in the short run there is unidirectional Granger causality running from stock prices in Pakistan to India, stock prices in Sri Lanka to India and from stock prices in Pakistan to Sri Lanka. Bangladesh is found to be the most exogenous of the four markets.

Borges (2008) who employed tests namely, autocorrelation, runs, ADF unit root and multiple variance ratios to verify the presence of random walk revealed that the markets in France, Germany, U.K and Spain followed a random walk; however, there exist positive serial correlation in returns of Greece and Portugal.

In the Indian context, Sharma and Kennedy (1977), Barua (1981), Gupta (1995) observed that the stock returns in India conform to random walk hypothesis Madhusoodanan (1993) used the various ratio tests in order to find out the temporary and permanent components of the stock market based on industry indices. He concluded that the Indian stock market is mean reverting.

ISSN 2076-9202

Ramasastri (1999) tested Indian stock markets for random walk during post liberalization period using three Dickey-Fuller hypotheses. Contrary to other studies, he could not reject the null hypothesis that stock prices are random walks.

Mitra (2000) who employed neural network method rejected the random walk hypothesis. Similarly, Chaudhuri and Wu (2004) on the basis of unit root tests, conclude that returns in India do not follow a random walk.

Poshakwale (2002) provides evidence of non-linear dependencies in BSE stock returns. A set of tests as such auto correlation, unit root, GARCH model and non parametric runs and Kolmogorov-Smirnov test find support against random walk (Ahmad et al, 2006). However, interestingly Chawla et al (2006) reported that Nifty and Sensex are weak form efficient. Thus, as in case of other markets, the results for India too remain inconclusive.

To sum up, although, the literature on random walk and market efficiency is vast; there is no consensus among the researchers regarding efficiency of the market. The different tests yield different results. Hence, we thought to verify the presence of the weak form of efficiency in the contemporary context.

Hypothesis

The following hypotheses have been selected for the study:

H_{01}=The Indian stock markets follow a random walk

Ha_1=The Indian stock markets do not follow a random walk.

Data, Variables and Methodology

The present study has been done for a period of five years, i.e. 1 January, 2006 to 31st December, 2010 on the basis of daily data of the following four indices:

1. BSE 100
2. BSE 500
3. CNX 100
4. S & P CNX 500

ISSN 2076-9202

In this study, the stock returns are measured as the continuously compounded daily percentage change in the share price index in order to avoid the influences of extreme index values. Symbolically,

$R_t = [P_t – (P_{t-1})/(P_{t-1})]*100$

Where R_t is the return in the period't', P_t is the daily closing share price index of the NSE at a particular time 't'; (P_{t-1}) is the closing share price index for the preceding period.

The study employs tests of normality, unit root test, Durban Watson (DW), Box-Pierce Q Statistics, Runs Test.

Results and Discussion

Test of Normality

One of the basic assumptions for testing the random walk model is that return series should be normal. The assumption of normality has been tested with the help of Kolmogorov Smirnov Test. The results obtained are as follows:

TABLE

SELECTED INDEX	K-S TEST STATISTIC (Z)	ASYMP.SIG.(2-TAILED)
BSE 100	3.133	.000*
BSE 500	3.216	.000*
CNX 100	3.008	.000*
S & P CNX 500	3.238	.000*

*Significant at 1% Level of Significance.

The results of the tests indicate that the return series is normally distributed. Now, we can test for unit root.

Unit Root Test

Augmented Dickey Fuller Test (ADF) Test

At the outset, an attempt has been made to verify the stationary nature of the series in the form of returns on the closing selected indices in Indian Stock Market. For an empirical test of the above, Augmented Dickey-Fuller(ADF) Unit Root Test is made with null hypothesis as

there is unit root in the series and alternate hypothesis as

there is no unit root and the series in stationary.

TABLE

SELECTED INDEX		**ADF t-Statistic**	**Probability**
BSE 100		-32.46501	0.0000*
BSE 500		-31.82580	0.0000*
CNX 100		-33.20581	0.0000*
S & P CNX 500		-32.14873	0.0000*
Test critical values:	1% level	-3.435419	
	5% level	-2.863666	
	10% level	-2.567952	

* Significant at 1% Level of Significance as well.

Durbin Watson Statistics

The most celebrated test for detecting serial correlation/autocorrelation is that developed by statisticians, Durbin and Watson. If DW statistic is two or near to two, then the series have no autocorrelation or it's near to zero; if the value of DW statistic is moving away from two and going towards zero, then there is positive autocorrelation; and if this value is more than two but less than four, then the series have negative autocorrelation

TABLE

SELECTED INDEX	**TEST STATISTIC (d)**
BSE 100	1.996279
BSE 500	1.998111

CNX 100	1.998241
S & P CNX 500	1.999260

The result of Durbin Watson Statistic shows that all the three indices have DW statistic very much near to two. So, it can be judged that there is no autocorrelation in the stock market returns on any of the three selected indices.

Runs Test

The runs test (also called Wald-Wolfowitz test) is a nonparametric test that checks a randomness hypothesis for a two-valued data sequence. More precisely, it can be used to test the hypothesis that the elements of the sequence are mutually independent.

Runs Tests is Used to Test

1. The randomness of a distribution, by taking the data in the given order and marking with + the data greater than the median, and with – the data less than the median; (numbers equalling the median are omitted.)

2. Whether a function fits well to a data set, by marking the data exceeding the function value with + and the other data with − For this use, the runs test, which takes into account the signs but not the distances, is complementary to the chi square test, which takes into account the distances but not the signs.

To measure the central tendency median is used for these three selected indices: CNX 100, BSE 200, and S&P CNX 500 (Table-7, Table-8, and Table-9). With the help of SPSS (statistical software) run test on median is used and the result for all these three selected indices are in favour of the hypothesis that daily returns on the market indices are independent to previous day returns and random walk theory persist in the Indian stock market also.

It is also called Wald-Wolfowitz test. This is a non-parametric test which is used to determine whether the change of prices is serial or random. This test is an appropriate statistical technique to test the weak form market efficiency. A run is defined as a series of consecutive returns of the same sign. “+” stands for a price increase, “-“stands for a price decrease, and “0” stands for no change in price. To test the randomness of distribution, the data whose value is greater than median is marked

with + sign, with – sign the data less than the median.

SELECTED INDICES	NUMBER OF RUNS	Z VALUE	ASYMP SIG.(2) TAILED
BSE 100	611	-.540	.589
BSE 500	595	-1.449	.147
CNX 100	615	-.313	.755
S & P CNX 500	599	-1.222	.222

***based on Median.**

Conclusion

W lten we look at tlze random wu Ik theory the returns can not be predicted becau se they f oll()w random w'alk But there are som e com panies w hich follows particu lar pattern and therefore returns can be predicted

The returnti of all the above scrips can be predicted by lNe investors by using the hisforical inf orm afion of the scrips, the reason being fhat scrips of these com panies follow certain pattern. Taking into coltsideration the oljectives of the study the follow ing conclusion can be draw n.

The stock prices of a substantial num ber of selecked stocks listed on NSE have accepted the null itypothesis. This im plies that these stoc ks cannot be Ivcdicted by tzsing historical pzices. In o th er w o rds tb e tec h n ic a l an n a list

cannot play an inlportant Tole i n fram ing investm ent strategy. However the majority of the scrips folltyw random w alk. l lere technical analyst can play an im portant role. It helps them to find ou t the com panies where trends are

repeated in future. lt can be seen that the majority of the sc rips i . e. 69 % are pursuïng randorr walk. They canncrt earn a bnorm al retu rn f rom their investmeni in fhose scrips. This finding helps them to take w ise: investm ent decisions.

ASISM Jeurnal of Managemenl, 1 (1), 2008

W lten we look at tlze random wu Ik theory the returns can not be predicted becau se they f oll()w random w'alk But there are som e com panies w hich follows particu lar pattern and therefore returns can be predicted

The returnti of all the above scrips can be predicted by lNe investors by using the hisforical inf orm afion of the scrips, the reason being fhat scrips of these com panies follow certain pattern. Taking into coltsideration the oljectives of the study the follow ing conclusion can be draw n.

The stock prices of a substantial num ber of selecked stocks listed on NSE have accepted the null itypothesis. This im plies that these stoc ks cannot be Ivcdicted by tzsing historical pzices. In o th er w o rds tb e tec h n ic a l an n a list cannot play an inlportant Tole i n fram ing investm ent strategy. However

the majority of the scrips folltyw random w alk. l lere technical analyst can play an im portant role. It helps them to find ou t the com panies where trends are The EM H states that it w ou Id be impossible to consistently outperform the m arket in an environm en t ch a ra e terized b m a J' ny co m p ei i n g ïnvestors, each wfth sim ilar objectiv'es and equal access to sam e inftlrm ation Thuss if the m azkets aare efficjent the.n trying to pic k up w inners f or investment purpose wril) be a waste of tim e. On the other hand if the m arkets are pot efficient then excess returns can be m ad e by correc t1y pic king the winners. If the stock prices are not independent, it is fxlssible to oblain increased profits fm the basis of price change lvedictions. The study adopted runs tasLe in five sectors to find whether rand om w alk hypothesis is valid in them or not. The result show s that random walk hypothesis is not valid fn case of som e com panies from a11 sectors. The em pirical resu lts shown hertl aze lentative and further rtlsearch is needed to address the lssue.

ISSN 2076-9202

IV. Policy Implications

The efficiency of stock markets is closely related to the allocation of scarce capital resources. The allocation of capital resources to their most productive use can only be achieved in the presence of an efficient pricing mechanism. The efficient dissemination of information should ensure that capital is allocated to projects that yield the highest expected return with necessary adjustment for risk. Thus, pricing in an efficient market has the potential of affecting the allocation of an economy's savings and investment. As India moves towards a free economy, where stock markets have a major role to play, this has serious implication for resource allocation. The government has to formulate policies to ensure that the stock markets discharge this allocation function effectively. The government has permitted the participation of foreign institutional investors and it is said that their participation improves the efficiency of the markets. However, if markets are inefficient, profitable trading opportunities may exist, which may be used by the foreign institutional investors to earn excess profits at the cost of other players in the market. SEBI needs to take steps to increase the informational efficiency of the stock market.

ISSN 2076-9202

IV. Conclusions

The empirical results from the Dickey-Fuller test for a unit root did not reject the null hypothesis for the entire data sample, including all 14 stocks and the BSE 100 stock index. This provides us with evidence supporting the random walk hypothesis for the time series.

Our empirical findings from the variance ratio test suggests that stocks on the Bombay Stock Exchange follow a random walk process. Our empirical findings from Lo and MacKinlay's variance ratio test supports the random walk process for stocks on the Bombay Stock Exchange. However, there is an indication of stationarity for the BSE 500 stock index. Nonetheless, random results are displayed by the BSE 100 Index. Our findings are consistent with the conclusions of many other researchers (see, for example, Lo and MacKinlay (1988), Fama and French (1988) in the U.S. capital market). It should be noted that rejection of the random walk hypothesis would not necessarily imply rejection of market efficiency. According to Summers (1986), the rejection of the random walk hypothesis in a given market can only mean the findings are inconsistent with the particular martingale process of a random walk. A possible explanation for the rejection of the random walk hypothesis is market imperfection arising from suboptimal information transparency, which prevents proper dissemination of information among investors. The rejection of the random walk process also conforms with Fama and French's (1988) hypothesis on the mean reverting behavior of stock prices as a possible result of overreacting to sudden changes in fundamentals. These conclusions are similar to those found in the U.S. stock market and elsewhere. The implications of these results are that investors cannot earn excess profits using past stock prices as their sole source of information.

ISSN 2076-9202

References

1. Ahmed, K. M., Ashraf, A. & Ahmed, A. (2006). Testing weak form of efficiency for Indian stock markets. Economic and Political Weekly, January 7, 46-56.

2. Alam M. I., Hasan T. and Kadapakkam, P. (1999), "An Application of Variance Ratio Test to Five Asian Stock Markets", Review of Pacific Basin Financial Markets and Policies, 2, 301-315.

3. Ayadi, O.P. and Pyun, C.S. (1994), "An application of variance ratio tests to the Korean Securities market", Journal of Banking and finance, 18, 643-658.

4. Bachelier, L. (1900). Theory of Speculation, A Thesis submitted to the Faculty of the Academy of Paris on March 29, 1900 and also In Cootner, P H (1967), (Eds), The random walk character of stock market prices, Cambridge: Mass, MIT Press.

5. Barua, S. K. (1981). The short run price behaviour of securities: Some evidence on efficiency of Indian capital market. Vikalpa, 16(2), 93-100.

6. Borges, M..R. (2008). Efficient market hypothesis in European stock markets, Working Paper, WP 20/2008/DE/CIEF, 1-20.

7. Chaudhuri, K. & Wu, Y. (2004). Mean-reversion in stock prices: Evidence from emerging markets. Managerial Finance, 30, 22-37.

ISSN 2076-9202

8. Chawla, D., Mohanty, P.K. & Bhardwaj, S. (2006). Random walk hypothesis and integration among the Indian stock market vis-à-vis some developed markets. Prajnan, 34(2), 113-127.

9. Chiang T. C., Yang, S. Y. and Wang, T. S. (2000), "Stock Return and Exchange Rate Risk: Evidence from Asian Stock Markets Based on a Bivariate GARCH Model," International Journal of Business 2, 97-117.

10. Darrat, A.F. and Zhong, M., "On Testing the Random-walk Hypothesis: A Model Comparison Approach", 2000.

11. Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. Journal of Finance. 25, 383-417.

12. Fama, E.F. (1965), "The Behaviour of Stock Market Prices," Journal of Business, 28.1 (January), pp. 34-105.

13. Grieb, T. and Reyes, M.R., (1999), "Random walk tests for Latin American equity indexes and individual firms", The Journal of Financial Research, XXII (4), 371-383.

14. Gupta, O. P. (1985). Behaviour of share prices in India: A test of market efficiency. New Delhi: National Publishing House.

15. Hiremath , Gourishankar S and Kamaiah Bandi (2010), "Some Further Evidence on the Behaviour of Stock Returns in India", International Journal of Economics and Finance, Vol. 2, No. 2,May,pp. 157-167.

16. Jennergren, L. P. & Korsvold, P. E. (1974). Price formation of the Norwegian and Swedish stock markets: Some random walk tests. The Swedish Journal of Economics, 76, 171-185.

ISSN 2076-9202

17. Kim, M.J., Nelson, R.C. and Startz, R. (1991), "Mean reversion in stock prices? A reappraisal of the empirical evidence", The Review of Economic Studies, 58, 515-528.

18. Madhusoodanan, T.P., (1998), "Persistence in the Indian Stock Market Returns: An Application of Variance Ratio Test", Vikalpa, Vol. 23, No.4, 61-73.

19. Magnusson M A and Wydick B (2002) "How Efficient are Africa's Emerging Stock Markets," Journal of Development Studies 38, 141-156

20. Ming,L.K., Nor, F.M. and Guru, B.K., "Random Walk and Technical Trading Rules: Some Evidence from Malaysia", 2000.

21. Mitra, S. K. (2000). Forecasting stock index using neural networks. The ICFAI Journal of Applied Finance, 6, 16-25.

22. Narayan N, Smyth R and Nandha M (2004) "Interdependence and Dynamic Linkages between the Emerging Stock Markets of South Asia," Accounting and Finance, 44, 419 - 440

23. Nayak, Keyur.M. (2008), "A Study of Random Walk Hypothesis of Selected Scrips", ASBM Journal of Management 1(1), pp.118-127.

24. Parameswaran, S.K.,(2000), " A Method of Moments Test of the Random Walk Model in the Presence of Bid-ask Spreads and Non-synchronous Trading", Applied Finance, Vol.6, No.1, 1-22.

25. Poshakwale, S. (2002). The random walk hypothesis in the emerging Indian stock market. Journal of Business Finance & Accounting, 29, 1275-1299.

26. Ramasastri, A.S. (2000), "Market Efficiency in the Nineties: Testing Efficiency in the Nineties: Testing through Unit Roots", Prajnan, Vol. XXVIII, No.2, 155-161.

27. Samuelson, P. (1965). Proof that properly anticipated prices fluctuate randomly, *Industrial Management Review*, 1, 41-49.

28. Segot, T.L. & Lucey, B.M. (2005). Stock market predictability in the MENA: Evidence from new variance ratio tests and technical trade analysis, IIIS Discussion Paper, No. 92, November. Samuelson, P. (1965). Proof that properly anticipated prices fluctuate randomly, Industrial Management Review, 1, 41-49.

29. Sharma J. L. & Kennedy, R.E. (1977). Comparative analysis of stock price behavior on the Bomabay, London and New York stock exchanges. Journal of Financial and Quantitative Analysis, 31, 391-413.

30. Smith, G., Jefferis, K. & Ryoo, H. J. (2002). African stock markets: Multiple variance ratio tests of random walks. Applied Financial Economics, 12, 475-484.

31. www.bseindia.com

32. www.finance.yahoo.com

33. www.nseindia.com

ISSN 2076-9202

Poor Quality Cost and Revenue Management in a Production Line

Jia-Chi Tsou
Department of Business Administration,
China University of Technology,
No. 530, Sec. 3, Jung Shan Rd., Hu Kou Township, Hsinchu County, Taiwan 303.
Tel: (+886-3) 437-8362, Fax: (+886-3) 437-8362
E-mail: jtsou.tw@yahoo.com.tw

Abstract: Existing research works on process quality improvement focus largely on the linkages between quality improvement cost and production economics such as set-up cost and defect-rate reduction. This paper deals with the optimal design problem for process improvement by balancing the sunk investment cost and revenue increments due to the process improvement. We develop an optimal model to imitate this condition. According to this research, the management can adjust the investment on prevention and appraisal cost on quality improvement that enhances process capability, reduces product defect-rate and, as a result, generates remarkable financial return.

Keywords: Process quality improvement , revenue management.

ISSN 2076-9202

1. Introduction

The optimal investment problem in balancing of investment sunk cost and future financial return generated from set up cost reduction and quality improvement was initially dealt by Porteus (1986). A stream of follow-up research has been extensively studied since then, that primarily focus on optimizing the economics of production quality improvements. Notable works include Tapiero (1987) that links the optimal quality inspection policies with the improvement in manufacturing costs, Fine (1988) who used a stochastic dynamic programming model to characterize optimal inspection policies, and Fine and Porteus (1989) who refined Porteus's original work to allow smaller investments over time with potential process improvement of random magnitude. In addition, Chand (1989) took the learning effect into account in model development, Hong et al. (1993) established the relationship between process quality and investment, and Ganeshan et al. (2001) applied Taguchi's cost of poor quality into the model.

The aforementioned research works investigate the interaction between the economics of production and process quality improvement. However, there are some shortcomings in the existing works. Their research emphasizes particularly on discussing benefits of economic lot-size models (ELSM) generated by quality improvements. The thinking of lot-size scheduling comes from the Japanese lean manufacturing philosophies and is an important part of the Just- In-Time system. The Japanese lean manufacturing philosophies emphasize the policies of continual investment in quality improvement and setup cost reduction towards the goals of zero defects and zero cycle inventories (Schonberger, 1986). The economic lot-scheduling model can contribute to the joint decisions of economic production and quality investment, but it is difficult to measure the financial return on quality investment to a company. This shortcoming limits the practical use of previous models.

With the emerging of the 6-sigma quality method, quality improvement activities are valued by their financial return on quality investment. Basically, this is an extension of the concept of yield management. Yield management applications that

ISSN 2076-9202

use mathematical programming methodology to maximize net revenue have been applied in many service industries (Bitran and Mondschein, 1995; Smith et al., 1992). In a manufacturing environment, yield management is a tool for motivating extra demand, and generating additional revenue (Weatherford and Bodily, 1992).

In this paper, we make three significant contributions to the area. First, we develop a model that can help the joint decision on financial and quality. This job is very difficult for the traditional production-quality model. In our model, we focus on the financial return of quality investment but not the lot-size optimization. Second, we extend the applications of yield management especially in the field of quality improvement. In our model, quality enhancement has been seen as an incentive to sale. This change extends the definition of discount in yield management. Third, a practical case in the automotive industry, which obeys the methodology of 6-sigma quality improvement, is discussed to verify the model we proposed. To the best of our knowledge, this is the first 6-sigma quality improvement case in the yield management research and the economics of quality investment.

In the next section, we will introduce the model in this paper. Afterward, a case in automotive industry will be used to verify the model we proposed. In this case, the 6-sigma quality improvement methodology will be applied in the process of problem solving. Finally, the conclusion of this paper will be made.

2. Financial model on quality investment

We start with the objective function that states the net earning of production equals to the revenue minus the cost of production (Elimam and Dodin, 2001). This objective function is emerging from the concept of yield management in business operation. Elimam and Dodin's research has brought the concept of yield management to the production line to enhance productivity and maximize net revenues. This concept will be applied as the basis to develop our model.

Net earning = Revenue – Cost

where

Revenue = Sales + Sales increased by quality improvement

and

Cost = Manufacturing cost + Variable cost of sales increased by quality improvement

+ Cost of poor quality + Cost for quality investment

Then, the objective function can be represented by

Net earning = Sales + Sales increased by quality improvement

– Manufacturing cost

– Variable cost of sales increased by quality improvement

– Cost of poor quality

– Cost for quality investment.

The notation is summarized below.

Parameters

S: sales in the initial stage

α :exponent constant in the function relating quality investment with the increase in sales

P: unit price

USL : upper specification limits

LSL : lower specification limits

μ_o: initial value of population mean of quality characteristic

μ_t: target value of population mean of quality characteristic function.

σ_M^2 : maximum level of the variance of the system

σ_L^2 : minimum level of the variance of the system

F: fixed cost of production

V: variable cost of unit production

C_r: rejection cost / unit

Independent Variables

I : total cost of quality investment

X: actual value of the quality characteristic

ISSN 2076-9202

Dependent Variables

SQ(I): sales increasing by quality Investment

$SQ(I) = I^{\alpha}$ /P

D(X, I): quality distribution function; (normal distribution function)

D(X, I)= $\frac{1}{\sigma(I)\sqrt{2\pi}} e^{-(X-\mu(I))^2/2\sigma(I)^2}$

$\mu(I)$: population mean of quality characteristic

$\mu^2(I) = \mu_t^2 + (\mu_0^2 - \mu_t^2)e^{(-\phi I)}, \phi > 0$

$\sigma(I)$: population standard deviation of quality characteristic

$\sigma^2(I) = \sigma_L^2 + (\sigma_M^2 - \sigma_L^2)e^{(-bI)}, b > 0$

L(X): loss of poor quality per unit products

L(X) = K (X- μ_t)^2 ; LSL $\leqq$ X $\leqq$ USL

L(X)= C_r ; X $\leqq$ LSL , X $\geqq$ USL

K: Taguchi loss parameter

K= C_r/U^2

U: distance of the target mean from the specification limits

U = (USL- μ_t) = (μ_t-LSL)

Each term in our objective function can be defined as below:

Sales = S * P

(1)

The first term in the net earning equation is the initial sales income. The sales income of a company can be expressed as the product of the amount of sales and the unit price of each item.

Sales increased by quality improvement = SQ(I) * P

(2)

The second term is the sales increased by quality improvement. We define this term as the product of sales increased and the unit price of each product.

Based on the model of Eliman (2001), the function of sales increased by quality

investment, SQ(I), can be defined as :

SQ(I): sales increasing by quality investment

$SQ(I) = I^{\alpha} / P$

α : exponent constant in the function relating quality investment with the increase in sales

As α = 0.5 and P = 15, we can draw the function of SQ(I).

The exponent constant, α, can be generated by regression analysis of the historical data of the sales and quality level in a company.

Manufacturing cost = Fixed cost + Variable cost = F + (V*S)

(3)

The third and fourth terms in the objective function are fixed and variable cost of manufacturing. The manufacturing cost can be divided into two parts, one is the fixed cost of company operation and the other is the variable cost that increases with the amount of production.

Variable cost increase by sales increased by quality improvement = V * SQ(I)

(4)

The cost of production that is increased by the sales increase by quality improvement can be expressed as the product of variable cost of unit production and the sales increase by quality improvement, and this is the fifth term in our objective function.

Cost of poor quality = $(S+SQ(I))^* \int_{-\infty}^{\infty} L(X) * D(X, I) dX$

(5)

The sixth term is the cost of poor quality. This term is the product of total sales and the Taguchi's PQC of unit product.

D(X, I) is the quality distribution function of production. In this model, we propose the quality characteristic performs as a normal distributive function. Under this hypothesis, we can define the quality distributive function as:

ISSN 2076-9202

$$D(X, I) = \frac{1}{\sigma(I)\sqrt{2\pi}} e^{-(X-\mu(I))^2/2\sigma(I)^2}$$

$\mu(I)$: population mean of quality characteristic; population mean of normal distribution function.

$\sigma(I)$: population standard deviation of quality characteristic

$\sigma(I)$ and $\mu(I)$ are defined as functions of quality investment, I. The value of $\sigma(I)$ has an upper and positive lower bound. This is bound produced by the nature of production system or the limiting of practice. It is noted as, σ_M, the maximum or (current) level of the variance and , σ_L, the minimum level.

There is an initial mean of the population of quality characteristic, μ_o. μ_t is the target value of quality characteristic. Both of $\sigma(I)$ and $\mu(I)$ are functions of quality investment, I. The function of $\sigma(I)$ and $\mu(I)$ can be written as (Hong et al., 1993, Ganeshan et al., 2000):

$$\mu^2(I) = \mu_t^2 + (\mu_0^2 - \mu_t^2)e^{(-\phi I)}, \phi > 0$$

μ_o: initial value of population mean of quality characteristic

μ_t: target value of population mean of quality characteristic

As μ_o = 4.99, μ_t = 5 and ϕ =0.01, the function, $\mu(I)$.

$$\sigma^2(I) = \sigma_L^2 + (\sigma_M^2 - \sigma_L^2)e^{(-bI)}, b > 0$$

σ_M^2 : maximum or (current) level of the variance of the system

σ_L^2 : minimum level of the variance of the system

As σ_M = 0.1, σ_L = 0.05 and b=0.01, the function, $\sigma(I)$

There are two categories of the cost of poor quality. One is direct cost and the other is indirect cost. The direct poor-quality cost (PQC) encompasses two major type of expenditure: controllable PQC and resultant PQC. Controllable PQC includes prevention cost and appraisal cost. Resultant PQC includes internal error cost and external error cost. The other category, the indirect poor-quality cost, includes customer-incurred poor-quality cost, customer-dissatisfaction poor-quality cost and loss-of-reputation PQC (Harrington, 1987).

In order to link the costs of poor quality and quality performance, Taguchi has

provided a quadratic function to describe this relationship. Taguchi defines quality as, 'The quality of a product is the (minimum) loss imparted by the product to the society from the time product is shipped' (Bryne and Taguchi,1986). Taguchi's function direct link to the internal error cost and external error cost in direct PQC and indirect PQC. In our model, L(X) has been used to denote Taguchi's function.

In Taguchi's function, this cost reduces to zero when the output of the process exactly meets the target, and it increases quadratically as the process moves away. If X is the actual value of the quality characteristic, Taguchi's PQC function, L(X), can be expressed as: (Taguchi and Wu,1980)

$$L(X) = K (X- \mu_t)^2 \; ; \; LSL \leqq X \leqq USL$$

$$L(X)= C_r \; ; \; X \leqq LSL \; , \; X \geqq USL$$

$$K= C_r/U^2$$

$$U = (USL- \mu_t) = (\mu_t - LSL)$$

(6)

Where K is defined as C_r/U^2, C_r is the rejection cost of unit product and U is the distance of mean from the specification limits. It is assumed that the USL and LSL are equidistant from the mean i.e., $U = (USL- \mu_t) = (\mu_t - LSL)$. C_r includes the internal error cost and external error cost in direct PQC and indirect PQC to reject unit of product.

$$\text{Quality investment cost} = I$$

(7)

The seventh term in our objective function is the cost of quality investment. As mentioned above, there are prevention cost and appraisal cost in the direct PQC. The prevention cost and appraisal cost are used to improve the production to enhance the quality of product. We define the cost invested in improving the product quality to ensure that only customer-acceptable products and services are delivered to the customer as the cost of quality investment, I .

It is believed that the total quality investment, I , will affect the population mean and standard deviation of product quality distribution in the mathematical formula we

have mentioned previously.

With the definition above, we can develop the mathematical model that links the net earning and the cost of quality investment in a company. This is the objective function of our model.

Maximize

$$\text{Net earning} = [S*P + SQ(I)*P] - [F + (V*S) + V * SQ(I) + (S+SQ(I))* \int_{-\infty}^{\infty} L(X) * D(X, I)dX + I]$$

$$I, S, P \geqq 0$$

(8)

Terms in the right side of the objective function include: initial sales income, sales increased by quality improvement, fixed and variable cost of manufacturing, production cost increased by the sales increased by quality improvement, the cost of poor quality, and the cost of quality investment.

The objective function subjects to:

3. Conclusions

This paper has developed a mathematical model to optimize the return from quality investment. This model is based on the concept of yield management, and Taguchi's perspective of cost of poor quality has been used to develop the model of quality improvement. This model can be applied in such manufacturing companies as automotive, consumer electronic, computer, air condition, etc. Not only manufacturing company but also service industry can apply this model to enhance their yield management scheme. The potential application industries include air line, hotel, retailing, car rental, and network service enterprises.

Such a quality optimization model has several managerial implications. First, it can calculate the quality-associated cost, and compare it with improving the process to attain its optimal levels. Second, the quality cost in this model has been divided into two parts, the controllable PQC and the resultant PQC. Controllable PQC includes

prevention cost and appraisal cost, which is the item I in our model. The resultant PQC includes internal error cost and external error cost, which is Taguchi's loss in our model. In order to optimize the profit of operation, the management can adjust the investment on prevention and appraisal cost to change the outcome of the business operation.

Extension to this research includes introducing more financial factors and different quality evaluation models into this model. Sensitivity analysis on factors and different case applications are another direction to explore.

Reference

Banker, R., Khosla, I., and Sinha, K., 1998, Quality and competition, *Management Science*, **44**, 1179-1192.

Bryne, D., M. and Taguchi, S., 1986, The Taguchi Approach to Parameter Design. *ASQC Quality Congress Transactions*, **177**, 168-173.

Chand, S., 1989, Lot sizes and setup frequency with learning in setups and process quality, *European Journal of Operations Research*, **42**, 190-202.

Chen, J. M. and Tsou, J. C., 2003, An optimal design for process quality improvement: modelling and application, *Production Planning & Control*, **14**, 603-612.

Cheng, T. C. E., 1989, An economic production quantity model with flexibility and reliability considerations, *European Journal of Operations Research* **39**, 174-179.

Cheng, T. C. E., 1991, Economic order quantity model with demand-dependent unit production cost and imperfect production processes, *IIE Transactions*, **23**, 23-28.

Fine, C.H., 1988, A quality control model with Learning Effects, *Operations Research*, **36**, 437-444.

Fine, C. H. and Porteus, E. L., 1989, Dynamic process improvement, *Operations Research*, **37**, 580-591.

ISSN 2076-9202

Ganeshan, R., Kulkarni S., and Boone T., 2001, Production Economics and Process Quality: A Taguchi Perspective, *International Journal of Production Economics*, **71**, 343-351.

Goyal, S.K., Gunasekaran, A., 1990, Effect of dynamic process quality control on the economics of production, *International Journal of Operations and Production Management*, **10**, 69-77.

Goyal, S.K., Gunasekaran, A., Martikainen, T., Yli-Olli, P., 1993, Integrating production and quality control policies: A survey, *European Journal of Operational Research*, **69**, 1-13.

Hong, J., Xu, S.H. and Hayya, J.C., 1993, Process quality improvement and setup reduction in dynamic lot-sizing, *International Journal of Production Research*, **31**, 2693-2708.

Krishnan, M.S., Kriebel, C.H., Kekre, S. and Mukhopodhayay, T., 2000, An empirical analysis of productivity and quality in software products, *Management Science*, **46**, 745-759.

Lee, H.L. and Rosenblatt, M.J., 1987, Simultaneous determination of production cycles and inspection schedules in a production system, *Management Science*, **33**, 1125-1137.

Maghsoodloo, S. and Li, M.C., 2000, Optimal asymmetric tolerance design, *IIE Transactions*,

32, 1127-1137.

Ng, W. and Hui, Y., 1996, Interactive quality improvement of a process subject to complete inspection, *International Journal of Production Research*, **34**, 3275-3284.

Porteus, E.L., 1986, Optimal lot-sizing process quality improvement and setup cost reduction, *Operations Research*, **34,** 137-144.

Rosenblat, M.J. and Lee, H.L., 1986, Economic production cycles with imperfect production processes, *IIE Transactions*, **18**, 48-55.

Salameh, M.K. and Jaber, M.Y., 2000, Economic production quantity model for items with imperfect quality, *International Journal of Production Economics*, **64**, 59-64.

Taguchi, G.. and Wu, Y., 1980, *Introduction to Off-line Quality Control* (Central Japan Quality Control Association), Meieki Nakamura-ku Magaya, Japan.

ISSN 2076-9202

Tapiero, C., 1987, Production learning and quality control, *IIE Transactions*, **19**, 362-370.

ISSN 2076-9202