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FAMILYS PERCEPTION IN RELATION TO FAMILY BUSINESS MANAGEMENT

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ABSTRACT

Family perceptions play an important role in shaping the organization of businesses and their efficiency. The aim of this paper is to understand which dimensions of family perceptions are most persistent and have the biggest impact on family businesses. Data for collection has been selected from 150 family businesses of Ujjain district of (M.P) India. More research needs to be done to assess the relevance of cultural explanations for family firms and the exact mechanisms through which family perception affect firms.

INTRODUCTION

Family business is a vibrant area of growing interest today among research theorists, investor's, policymakers, and many others with good cause. Recent research has demonstrated that family firms are top performers. A detailed review of definition employed in studies reveals that there is no clear demarcation between family and non family businesses and that no single definition can capture the distinction between the two types of entities. Family business has been defined as a business that is owned and managed (i.e., controlled) by one or more family members (handlers, 1989. Hollander & Elman, 1988). A more detailed definition is provided by Davis and Tagiuri (1982) they define family firms as: organization where two or more extended family members influence the direction of the business through the exercise of kinship, ties, management roles, or ownership rights, moreover Gallo (1944) has asserted that families are essentially same in every country in the world relative to their problems, issues and interests. The family business enterprise growing out of the family's needs built on

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the family's abilities worked by its hands and guided by its moral and spiritual values, when it is sustained by family commitment, and passed down to its sons and daughter as a legacy as precious as the family's nature (Astrachan et al, 2005) although many medium and small micro business are family-owned and operated, there is evidence that family firms are also fast growth firms and very large successful firms.

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In India, the highest generator and creator of wealth are family owned businesses. These families have existed for over hundred years and have influenced the economic and political situation of the country. Family wealth and innovation remains a potent force in the development of socio-economic systems. Astrachan (1988) has revealed through the examination of the impact of family firms undergoing a transfer of management that sensitivity to the existing culture of the firm and the local community is critical to the continued success of the business. Working from both a sociological and economic perspective, Benedict (1968) observes how the family firm is more important in the initial rather than the later stages of an economic systems development .At the same time his conclusions suggest the continuing important of a family firms characteristics in a deteriorating or unstable system. Just as families are the building blocks of a stable society ,so are family businesses important in building a stable economy. A family enterprise is by its very nature more inclined than other types of corporations to reinvest in itself to support and perpetuate wealth in future generations. The family firm has the capacity to make long-term investment and resist the pressure of analysts for short-term returns which frequently burden the publicly held corporation. Family firms are reported to have problems with joint decision-making, career choices and supervision of family members as employees, and succession issues, including tax burdens. Research on family firms remains a new field which trying to legitimacy within management studies (hoy, 2003).There is a dearth of research on family businesses and many aspects of such firms merit attention from both the businesses side and the family side. Although the importance of entrepreneurship and family businesses can be documented, the study of entrepreneurship as it matures

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into a family business and changes over time has only recently emerged. Such study is critically tied to the study of both the business and the family behind the business. The study of the family business can reveal new knowledge about business formation, growth and expansion, professionalizing, strategic management, and succession .From the business side, for example, we know very little about the difference of family firms between the large scale versus micro enterprises, and the dynamic of change over the life course of the family firm. Moreover, the growth rate of family firms, the problems of strategic.

REVIEW OF LITERATURES:

The field of family business research is of recent origin. The studies related to various issues of family business are presented below in chronological order, starting from 2009.

Debicki et.al (2009) state that the analysis of 291 family business articles published in 30 management journals between 2001 an 2007 reports the contributions of individual scholars and academic institution to family business research. To better understand the interrelationship among scholars who have contributed to family business research, a network analysis of coauthor relationship was conducted. The authors were providing a content analysis of the articles and offer suggestion for future research. By analyzing the who, where, and what of family business research, the reasons why the developmental trends have occurred and how the fields momentum, can be maintained and directed towards productive ends become clearer.

Cater and justrin (2009) have conducted an exploratory to better understand the development of successors in the small family business, including their approach to the leadership of the firm. It examined variables (and their relationships) that help to explain family business successor leadership. A case study was followed, used grounded theory analysis of qualitative interviews of the top managers of six family businesses. It provided six propositions for future research-namely, concerning positive parent-child relationships, acquiring knowledge, long-term orientation, cooperation, successor roles, and risk orientation.

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Kowalewski et.al (2010) has investigated the influence of family involvement on firm performance in an emerging market economy. Using a panel of 217 polish companies from 1997 to 2005, the authors find an inverted U- shaped relationship between the share of family ownership and firm performance. The data also reveal that firms with family CEOs are likely to outperform their counterparts that have no family CEOs. The results take into account the endogenous of family ownership and are robust to a number of specification checks.

Chrisman et.l (2010) has examined the 25 articles that have been particularly influential in shaping the state of the art of research on family businesses. These works identified based on a citation analysis of family business article published ever the past 6 years in the four journals that publish most of the research. The authors summarize those influential studies and discuss their most important contributes to scholars' current understanding of family business. By identifying common Themes among those studies, the authors are able to provide directions for future research in the field.

Lorna Collins, Nicholas O'Regan, (2011) Family business has evolved significantly over the past decade and today it is a well accepted and respected field of enquiry. In gaining academic acceptance, it has retained its practitioner roots. The paper argues that it is time for a re-think because the focus of previous family business research has become somewhat convoluted with small- and medium-scale enterprises research (at least in the UK) and with particular parts of the family business rather than the entire family business system. To continue its impressive upward trajectory, family business management and research needs to embrace new theoretical perspectives and approaches, particularly those that come from disciplines such as psychology that at the moment have tenuous links to family business studies. It also needs to embrace learning that can be gained from practitioners and develop useful discourse between stakeholder groups in the family business community

Alexandra Dawson (2012) the main focuses on the construct of human capital in family businesses. It makes three key contributions. First, it furthers our understanding of human capital in family businesses by identifying the underlying dimensions of human capital, involving not only knowledge, skills and abilities but also individual attitudes and motivation. Second, the article puts forward the conditions under

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which family businesses can achieve and sustain over time an alignment of interests between individual human capital and organizational goals. These conditions will vary depending on whether the external environment is static or dynamic. Third, the article heeds the call, shared by strategic management scholars, to focus on the individual level as well as on the (predominant) group- and organizational-level constructs.

STATEMENT OF THE PROBLEM:

Family perceptions may play an important role in shaping the organization of businesses and their efficiency. However, the macro-type evidence presented here can at best be suggestive. More research needs to be done to assess the relevance of cultural explanations for family firms and the exact mechanisms through which family perception affect firms. It would be of particular interest to understand which dimensions of family perceptions are most persistent and have the biggest impact on family businesses. The foregoing review of literature reveals that family business has its own dynamics and should be studied as a separate construct. Through this field of research is a phenomenon of last two-three decades only, a lot of research has undergone on family business issues, especially in the western countries. The literature also reveals that only few studies have been conducted on family businesses management in India. In view of the fact that majority of the businesses in private sector are managed by families in India, there is urgent need to explore the influence of families on business operations and performance. This study is an endeavor to fill these research gaps.

RESEARCH METHODOLOGY:

(i) Sample Size

To achieve the stated objectives of this research a sample of 150 family businesses were selected as respondents. The sample constitutes of Power loom, Handicraft, Namkeen & Sweet shop, Hotels, and agriculture businesses. I have conducted my research survey in Ujjain district from varies thesils, like Barnagar, Mahipur ,Tarana ,Ghatiya.

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(ii) Data Sources

The study is mainly based on primary data which was collected through a well structured questionnaire consisting of 32 questions. The data was collected extensively from Ujjain city and other thesils of Ujjain district (M.P) India. Those family businesses were identified and focused since they had sufficient knowledge about their family business.150 family business firms from Ujjain district ;(as per the criteria set); were identified and surveyed for the purpose of this study. The firms in the sample included 30 firms each from Power loom, Handicraft, Namkeen & Sweet shop, Hotels, and agriculture businesses. Data were analyzed using the Software Package for Social Sciences (SPSS).

(iii) Dependents and independent variables used in the study:

In the present study the family's perception is a dependent variable. While family's value scale of Sales Growth, Return on investment, Service Quality, Business culture and latest technology are independent variables.

RESULTS

Chart1

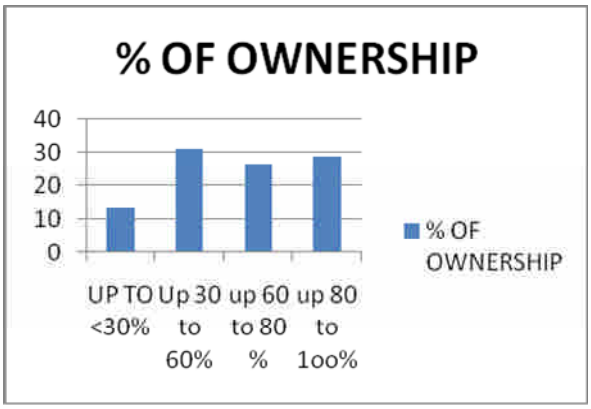

Chart 1 shows the distribution of sample respondents on the bases of % of ownership. It is observed that the distribution of respondents is classified as up to <30%, 30 to 60%, 60 to 80% and 80 to 100%. In our

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study 13.3percent of the family businesses having up to <30% of ownership in their business, 31.3percent of the family businesses having up 30 to 60 % of ownership in their business, 26.7 percent of the family businesses having up 60 to 80 % of ownership in their business, 28.7percent of the family businesses having up 80 to 100 % of ownership in their business

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Chart2

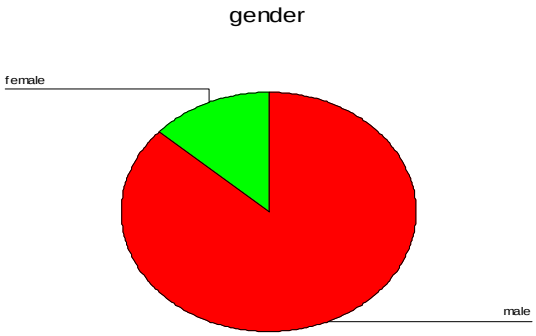

Chart 2. Shows the distribution of sample respondents on the bases of gender. It is observed that the distribution of respondents is classified as male and female. In our study 86.7 percent of the family businesses are operated by male and 13.3 percent of family businesses are operated by female. Therefore it is found that majority of family business is operated by are male followed by female. This small percentage of woman's participation in family businesses is because of their cultural obstacle.

Chart 3 SHOWING THE DISTRIBUTION OF RESPONDENTS ON THE BASES OF FAMILY TYPE

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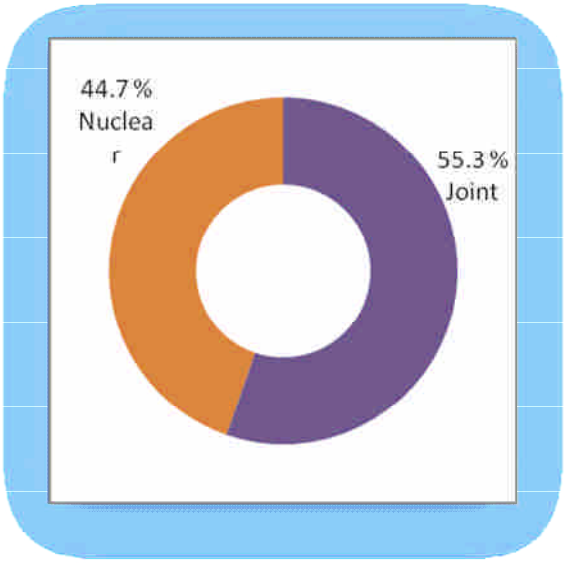
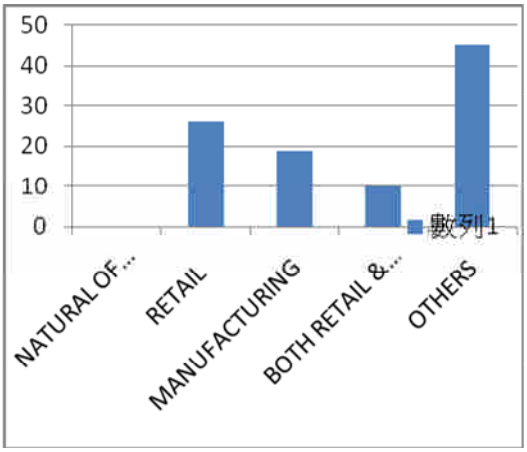


It is observed that the distribution of respondents is classified as Joint family and nuclear family. In our study among the total number of respondents 55.3 percent belongs to joint family and 44.7 percent belongs to the nuclear family. Therefore it is found that majority of family's are from joint family as they have more deposable income as compared by nuclear families

Chart 4 SHOWING THE DISTRIBUTION OF RESPONDENTS ON THE BASES OF NATURE OF BUSINESS



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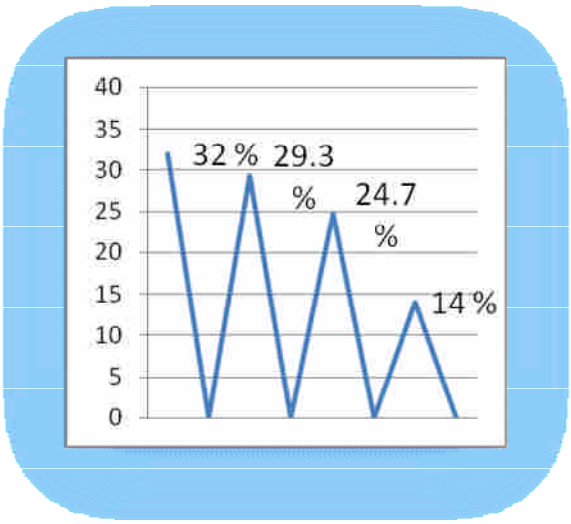
It is observed that the distribution of respondents is classified as Retail which constitutes 26 percent respondents, Manufacturing which constitutes 18.7 percent respondents, both Manufacturing and Retail respondents which constitutes 10 percent and others (which includes prospective agricultural , service)constitutes 45 percent respondents.

Chart 5 SHOWING THE DISTRIBUTION OF RESPONDENTS ON THE BASES OF MONTHLY INCOME



It is observed that the respondents under the monthly income group of up to 10,000 are 32 percent, respondents under the monthly income group of 10,000 to 20,000 are 29.3 percent, respondents under the monthly income group of 20,000 to 30,000 are 24.7 percent and respondents under the monthly income group of 30,000 and more are 14 percent.

Chart 6 SHOWING THE DISTRIBUTION OF RESPONDENTS ON THE BASES OF NUMBER OF DEPENDENTS

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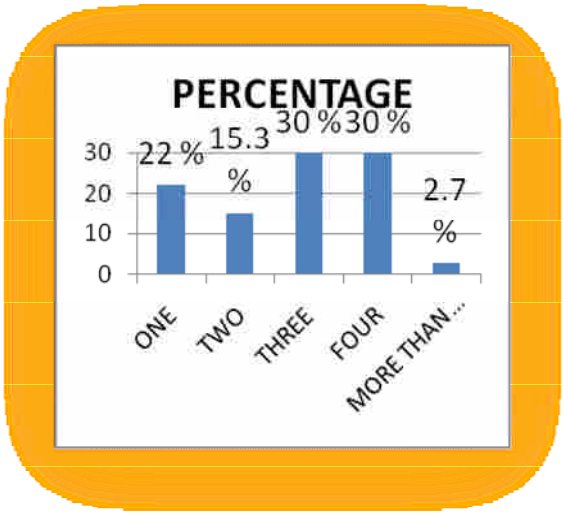

It is observed that 22 percent of the sample respondents are having one dependent , 15.3 percent of the respondents are having two dependents are, 30 percent of the sample of respondents are having three dependents are, 30 percent of respondents are having four dependents and 2.7 percent of the respondents are having more than four dependent.

TABLE.1 SHOWING THE CORRELATION BETWEEN DEMOGRAPHIC VARIABLES AND PERCEPTUAL VARIABLES

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PERCEPTUAL VARIABLES / DEMOGRAPHICS		PERCEPTION	SALES GROWTH	RETURN ON INVESTMENT	SERVICE QUAILITY	BUSINESS CULTURE	LATEST TECHNOLOGY USAGE
% OF OWNERSHIP	Pearson Correlation	-0.289	-0.161	0.080	0.125	-0042	0.039
	Sig. (2-tailed)	0.000	0.049	0.028	0.128	0.612	0.0492
	S/ NS	S	S	S	NS	NS	S
	N	150	150	150	150	150	150
GENDER	Pearson Correlation	0.343	0.354	-0.047	-0.303	0.238	0.006
	Sig. (2-tailed)	0.000	0.000	0.568	0.000	0.003	0.941
	S/ NS	S	S	NS	S	S	NS
	N	150	150	150	150	150	150
BUSINESS TYPES	Pearson Correlation	-0.189	-0.087	0.016	-0.189	0.117	0.038
	Sig. (2-tailed)	0.020	0.291	0.848	0.020	0.153	0.640
	S/ NS	S	NS	NS	S	NS	NS
	N	150	150	150	150	150	150
NATURAL OF BUSINESS	Pearson Correlation	0.343	0.092	0.144	0.343	-0.159	0.114
	Sig. (2-tailed)	0.000	0.265	0.078	0.000	0.051	0.167
	S/ NS	S	NS	NS	S	NS	NS
	N	150	150	150	150	150	150
MONTHLY INCOME	Pearson Correlation	0.240	-0.201	-0.037	0.240	-0.080	0.182
	Sig. (2-tailed)	0.003	0.014	0.650	0.003	0.333	0.026
	S / NS	S	S	NS	S	NS	S
	N	150	150	150	150	150	150
NUMBER OF DEPENDENTS	Pearson Correlation	-0.113	0.257	0.298	-0.113	0.021	-0.289
	Sig. (2-tailed)	0.167	0.001	0.000	0.167	0.802	0.000
	S/NS	NS	S	S	NS	NS	S

ANALYSES

The table clearly shows that there is significant relationship between percentage of ownership of family business with Perception, sales growth, Return on investment and latest technology usage, Gender with perception, sales growth, service Quality and Business culture. Business types with perception, service quality, Nature of business with perception and service Quality, Monthly Income with perception, sales growth, service quality and latest technology usage and Number of dependents with sales growth, Return on Investment and Latest technology at a 0.05 level of significance.

While there is no significant association of percentage of ownership with service quality and Business culture, Gender with Return on investment and Latest technology usage .Nature of Business with Sales Growth, Return on investment and ,Business culture and Latest technology, Monthly Income with Return on investment and Business culture are found Insignificant at 0.05 level of significance.

CONCLUSION:

The respondents 31.3 percent of the family businesses having upto 30 to 60 percentage of ownership in their business, 86.7 percent of the family businesses are operated by male and among the total number of respondents 55.3 percent belongs to joint family (which includes prospective agricultural, service) constitutes 45 percent respondents. Family firms characteristics are in one side deteriorating the growth of family business and on other side families are the building blocks for a stable society, so the family businesses are important for building stability in an economy. 32 percent respondents are under the monthly income group of 10,000 to 20,000 and 30 percent of the sample of respondents are having three dependents, 30 percent of respondents are having four dependents on the family. So Extra ordinary effort by family members has the potential to boost up the performance of their business. Therefore, family managers should encourage the family members to strive for normally expected efforts. If there is overlapping of family values and business values, it may enhance the performance of the business. The

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performance of the family business is associated with the level of family member's commitment, loyalty and pride toward family business. Loyalty of members toward family business and common value system of family business will enhance the service quality and the employee satisfaction on the one hand and these may reduce absenteeism and employee turnover on the other hand. So to conclude it with an optimism thought, we hope all family business of India succeed further in the future towards the growth and development of the world economy.

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Profiling Green Consumers based on their purchase behaviour

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Abstract

The study aims to examine the impact of demographic variables on concern towards the environment and towards purchasing of green products. 325 samples were collected for this purpose from the major areas of Salem. All the hypotheses were tested using the statistical tool (chi-square) and the result were framed in appropriate manner. The findings indicate that irrespective of the demographic factors, many respondents have a concern towards the environment. Occupation and marital status plays a vital role in purchase behaviour. Married respondents are ready to pay more towards the green products. Future implications of the study were discussed.

Key words: Green Products, Green marketing, Environmental concern and Purchase behaviour

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Introduction:

"Green" is a word that most of us come across at least once in a day. Nowadays this concept is getting popularised among different categories of people irrespective of their demographic factors. Common man is more concerned about the earth. This is because, they understand the impact of Newton's third law (For every action, there is equal and opposite reaction) in environment. That means the extent to which we exploit the earth; it will show an opposite reaction in the form of natural disaster. The studies in past two decades have proved that there is an increase in the concern towards the environment. This has resulted in the emergence of the concept of "Green Marketing". The concept of Green Marketing was initially started as a concept of ecological marketing in the first workshop organised

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by the American Marketing Association (AMA) focused towards the environment in 1975.

Green marketing is the marketing of products that are presumed to be environmentally safe (AMA). The basic idea is that customers are provided with information of the environmental effect of the products and they can and use this information while deciding which product to purchase (Yogita Sharma, 2011)[1]. Thus Green Marketing can be termed as a process of safeguarding the nature or environment by making the customer to use or consume those products which do not harm the environment. It can also be defined as the process by which every human is doing his bit to have a sustainable environment.

The present study aims at finding out the relationship between various demographic factors with the environmental concern and thereby how it reflects in their purchase behavior. However there has been lots of study done on finding out the relationship between demographic factors and environmental concern (A. Diamantopoulos et al, 2003)[2] (McCann, 1974)[3].

Another important criterion that a marketer can take while profiling the customer is to identify the customer who can pay more towards the green products. Study shows that females, married and with at least one child living at home are willing to pay more towards green products. (Michel Laroche et.al, 2001)[4].

Literature Review

Profiling the customers:

Environmental awareness is the first step for green purchasing (Meyer, 2001)[5].There are number of articles which show that profiling the customers can help the retailer to project the green products in a most beneficial way that it will reflect on their purchase behaviour. The green consumers can be defined

1 Yogita Sharma (2011)Changing Consumer Behaviour With Respect To Green Marketing – A Case Study Of Consumer Durables And Retailing ZENITH International Journal of Multidisciplinary Research Vol.1 Issue 4, August 2011, ISSN 2231 5780 pg no 153

2 A. Diamantopoulos et al(2003) "Can socio-demographics still play a role in profiling green consumers? A review of the evidence and an empirical investigation" Journal of Business Research 56 (2003) page: 465–480

3 McCann JM. "Market segment response to the marketing decision variables." Journal of Market Research 1974; 11(4) pages: 399 – 415.

4 Michel Laroche et.al,(2001), "Targeting consumers who are willing to pay more for environmentally friendly products" Journal of consumer marketing, vol. 18 no. 6 2001, pp. 503-520,

5 Meyer, A. (2001). What's in it for the customers? Successfully marketing green clothes, Business Strategy and the Environment, Pages:317-330

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as pro-environmental consumers who consider the environment to be important when they purchase products and services (Arif Hartono, 2008)[6].

The present study aims to profile the customers based on the demographic factors and how these factors influence the purchase behaviour. It appears that consumers are concerned about the environment, and are ready to exhibit purchase behaviour reflecting this concern (Polonsky et a1. 1995)[7] to support a "green" brand (Oyewole 2001)[8].

The results of the study by Ishaswini and Saroj Kumar Datta(2011)[9] indicate that overall environmental concern is positively related with consumers' green buying or green purchase decisions in the context of their general purchasing behaviour.

It may be suggested that educated consumers tend to be aware of eco-friendly products and are also knowledgeable about environment related issues. It is worth noting that respondents exhibit low levels of willingness to pay a premium price for eco-friendly products, suggesting that green marketers in India may likely consider cost cutting strategies.

Environmental concern is still not a strong motive for majority of well educated respondents to purchase eco-friendly products. Shila Shahnaei (2012)[10] found out that Educational Level has significant effect on green purchasing among Malaysian consumers whereas gender and age don't have relationship with the purchase behaviour

Ruiz, Arcas and Cuestas (2001)[11] argued that gender plays an important role to be consumerists and environmental conscious consumers.Some of the research shows that male are being predominant in the concern towards environment and thereby towards the purchasing behaviour.

6 Arif Hartono (2008)Adopting Socio-Demographic Characteristics In Profiling Green Consumers: A Review Of Hypotheses Jurnal Si asat Bisnis Vol. 12 No. 1, April 2008 pg-56

7 Polonsky, Michael Jay and Alma T. Mintu-Wimsatt (1995). Environmental Marketing:Strategies, Practice, Theory, and Research, Haworth Press.

8 Oyewole, P. (200 1) Social costs of environmental justice associated with the practice of green marketing. Journal ofBusiness Ethics. Vol. 29:239-251

9 Ishaswini and Saroj Kumar Datta(2011) Pro-environmental Concern Influencing Green Buying: A Study on Indian Consumers Intemational Joumal of Business and Management Vol. 6, No. 6; June 2011 Pg: 128

10 Shila Shahnaei(2012)- The Relationship between Demographic Characteristics and Green Purchasing of Malaysian Consumers-interdisciplinary journal of contemporary research in business July 2012 Vol 4,no3 available at http://journal-archieves20.webs.com/234-251.pdf

11 Ruiz,S., Arcas, N. and Cuestas, P., (2001). Consumer attitudes towards ecological agrarian fruits and vegetables in Spain. A segmentation approach. Acta Horiculturae, 559, pp. 681-686

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Ronnie Irawan and Dahlia Darmayanti(2012)[12] found out that "there were no significant gender differences between male and females with regards to Environmental Concern". Panni (2006)[13] found that consumers' pro-social or pro-ethical behaviors are heavily influenced by demographic characteristics in terms of age, income level, education level and occupation.

A large number of studies found little or no relationship between demographic characteristics and environmental attitudes and behavior as the demographic variables have less explanatory power than the psychographic variables (Schwepker and Cornwell, 1991)[14].

Céline Michaud and Daniel Llerena (2010)[15] found that "Consumers generally decrease their willingness to pay for the conventional product once informed about its environmental impact."

A. Diamantopoulos et al (2003)[16] opined that no significant differences were found between individuals with children and those without on the environmental consciousness measures. His study also depicted the fact that there is no significant difference between marital status and environmental knowledge and concern.

Objectives:

- To identify the level of customers' concern towards the environment
- To analyze the level of significance of demographic factors on purchase behaviour
- To find out the category of people who are ready to pay more for green products.

Research Methodology:

The study was aimed to identify impact of one variable over another. It also describes the characteristics of various demographic factors on purchase behaviour and environment concern. So the study falls under both descriptive and empirical research.

Research Design: The study has both descriptive and empirical research design.

Area of the study and duration of the research: The area of the study was to identify the demographics

12 Ronnie Irawan and Dahlia Darmayanti (2012). The Influence Factors of Green Purchasing Behavior: A Study of University Students in Jakarta. Pg:8

13 Panni, M.F.A.K.(2006). The Effect of Consumerism towards customer attitudinal behavior in food industry in Malaysia. M.Phil. Multimedia University

14 Schwepker, C.H. and Cornwell, T.B. (1991). An examination of ecologically concerned consumers and their intention to purchase ecologically packaged products. Journal of Public Policy and Marketing, 10, 77-101.

15 Céline Michaud and Daniel Llerena(2010)- Sustainable consumption and preferences: an experimental analysis available at http://www.dime-eu.org/files/active/0/Michaud.pdf

16 Ibid2

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of different categories of respondents and its implication on their purchase behaviour. The duration of the study was from November 2012 to January 2013.

Population: The population in large was selected as the major areas of Salem city from **Five roads to Hasthampatti**, which is considered as one of the major shopping centre. The target population was those who frequently shop in supermarkets and departmental stores.

Data Collection: The primary data was collected through a structured questionnaire and interview schedule. The items used in the questionnaire were adopted from Roberts and Bacon Scale and other downloaded questionnaires from the net and modified based on the study. The secondary was collected through various journals and articles in website.

Sample size: 384 survey instruments were distributed, but only 325 samples were found to be useable.

Sampling technique: The researcher has used convenience sampling under non-probability sampling.

Tools used: Simple mean and chi-square test were used to analyze the data. Likert Scales have been used in the questionnaire

Profile of the respondents:

Gender	Male	**58%**
	Female	**42%**
Age(in years)	< 25	**31%**
	26-35	**37%**
	36-45	**20%**
	>45	**12%**
Education	High School	**12%**
	Diploma	**17%**
	Under Graduate	**35%**
	Post Graduate	**28%**

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	Others	**8%**
Marital Status	Single	**39%**
	Married	**61%**
Occupation	Employed	**46%**
	Self-employed/Business	**11%**
	Students	**30%**
	Homemaker	**13%**
Income(in rupees)	<10000	**27%**
	10001-20000	**40%**
	20001-30000	**23%**
	>30000	**10%**

Source: Primary data

Testing of the hypothesis: H1: Demographic factors does influence the purchase behaviour of the respondents

Respondents' demographic factors Vs Purchase Behaviour

Sl.No	Demographic Variables	Test Used	Degree of freedom	Calculated value	Table value	Result
1	Gender	Chi-square	4	4.85	9.488	No significance
2	Age		12	14.88	21.026	No significance
3	Education		16	19.54	26.29	No significance

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4	Marital Status		4	12.9	9.488	**Significance**
5	Occupation		12	25.3	21.026	**Significance**
6	Income		12	14.09	21.026	No significance

Source: Primary data

Inference:

The above analysis clearly shows that the demographic factors like gender, age, education and income does not play a significant role in the purchase behaviour.

The above stated concept is going against of the study based on gender by Bela Florenthal and Priscilla.A. Arling (2011)[17]stating that Females, more so than males, found green attributes important.

Shila Shahnaei (2012)[18] found out that Educational Level has significant effect on green purchasing among Malaysian consumers whereas gender and age don't have relationship with the purchase behaviour.

At the same time it can be seen that those who are married and exposed to a good occupation are more aware of the environment and are ready to purchase the products which have less negative impact on the environment.

Testing of second hypothesis: H2: Demographic factors play an effective role in environmental concern

Respondents' demographic factor Vs Environmental concern

Sl.No	**Demographic**	**Test Used**	**Degree of**	**Calculated**	**Table**	**Result**

17 Bela Florenthal and Priscilla.A. Arling(2011) Do Green Lifestyle Consumers Appreciate Low Involvement Green Products? The Marketing Management Journal Volume 21, Issue 2, Pages 35-45

18 Ibid7

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	Variables		**freedom**	**value**	**value**	
1	Gender	Chi-square	4	4.61	9.488	**No significance**
2	Age		12	14.31	21.026	
3	Education		16	13.46	26.29	
4	Marital Status		4	6.41	9.488	
5	Occupation		12	16.63	21.026	
6	Income		12	11.19	21.026	

Source: Primary data

Inference:

The above tabulation shows that there is no significance relationship between the various demographic factors and the concern towards environment.

The study go against the finding of Mahama Braimah and Ernest Yaw Tweneboah-Koduah (2011)[19] stating **"** younger persons are likely to be more sensitive to environmental issues." Same study also opine that education have a strong relation with environmental concern.

The study by Ishaswini and Saroj Kumar Datta (2011)[20]supports the current research finding by stating that "environmental concern is still not a strong motive for majority of well educated respondents to purchase eco-friendly products."

Testing of third hypothesis H3: Married respondents are ready to pay more towards green products

Sl.No	**Demographic Variable**	**Test Used**	**Degree of freedom**	**Calculated value**	**Table value**	**Result**
1	Marital Status	Chi-square	4	15.89	9.488	Significance

Source: Primary data

19 Mahama Braimah and Ernest Yaw Tweneboah-Koduah(2011) An Exploratory Study of the Impact of Green Brand Awareness on Consumer Purchase Decisions in Ghana, Journal of Marketing Development and Competitiveness vol. 5(7) 2011. Pg: 16

20 Ibid 9

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Inference:

The above calculation shows that married respondents are ready to pay more for green products. The idea behind this is they want to safe guard their future generation from all the negative impacts of the environment and they are ready to pay more for their sake. This may probably because they are having children. Study shows that females, married and with at least one child living at home are willing to pay more towards green products. (Michel Laroche et.al, 2001)[21].

Level of acceptance towards the environmental concern:

(5 point likert scale have been used for this table)

Sl. No	Factors	Acceptance with the factors						
		Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Mean
1	Aware that earth is getting polluted	154	112	38	10	11	325	4.19**
2	Consider myself as environmentally responsible	140	56	61	48	20	325	3.76
3	I personally avoid the usage of plastic bags	144	116	36	18	11	325	4.12**
4	I switch off lights or fans before leaving room	16	68	53	102	86	325	2.46*
5	I usually separate the trash for recycling	85	115	72	44	9	325	3.69
6	Most often I prefer public transport	63	38	101	56	67	325	2.92*
7	I use both sides of paper	37	118	92	65	13	325	3.31
8	I won't purchase a product if it damages the environment	138	110	58	11	8	325	4.10
9	I use reusable/ recyclable appliances at home	121	97	46	23	38	325	3.74
10	I understand the impact of pesticides on vegetables	100	58	85	35	47	325	3.40

21 Ibid 4

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Source: Primary data. ** denotes the highest value and * denotes lowest value.

Inference:

The above table shows that almost 90% are worried about the environment and they are aware that earth is getting polluted.

On the other hand, respondents are least bothered about taking an effective step to reduce the pollution as many of them don't opt for public transport.

This shows that even though the respondents are worried about the environment, least steps are being taken towards the safe- guarding it.

Level of acceptance towards the purchase behaviour

(5 point likert scale have been used for this table)

Sl.No	Factors	Acceptance towards the purchase behaviour						
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total	Mean
1	Conscious effort is being taken while purchasing	78	86	52	48	61	325	3.22
2	When choice is there, I will buy product which is less harmful	168	98	36	16	7	325	4.24**
3	I switched off the brand due to ecological reason	106	78	67	41	33	325	3.56
4	Purchase locally grown vegetables	67	48	92	76	42	325	3.06*
5	Eco-friendly logos make to change my purchase behaviour	131	123	23	32	16	325	3.98
6	I purchase green	36	21	48	133	87	325	2.34*

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	products as some of them contribute towards charity							
7	Trial offers make me to purchase green products	86	64	78	56	41	325	3.30
8	I purchase green products due word of mouth	122	92	65	28	18	325	3.83
9	I purchase green products because of its continuous promotion	63	72	87	62	41	325	3.16
10	Ready to pay more towards green products for the sake of future generation	171	90	34	16	14	325	4.19**

Source: Primary data. ** denotes the highest value and * denotes lowest value.

Inference:

The above table shows the purchase behaviour of respondents. It clearly depicts the fact that respondents mostly do a conscious effort to purchase the green products, provided it's available in the market. They also opine that they are ready to pay more towards green products.

This statement is supported by a study conducted by Leila Hamzaoui Essoussi, Jonathan D. Linton(2010)[22] stating that respondents are willing pay a large price premium for recyclable / reusable greener product.

Ishaswini and Saroj Kumar Datta's(2011)[23] study go against the above statements stating that it is worth noting that respondents exhibit low levels of willingness to pay a premium price for eco-friendly products, suggesting that green marketers in India may likely consider cost cutting strategies.

Most of them are ready to purchase by thinking that it will be safe for their family and children. At

22 Leila Hamzaoui Essoussi, Jonathan D. Linton, (2010),"New or recycled products: how much are consumers willing to pay?", Journal of Consumer Marketing, Emerald Vol. 27 Iss: 5 pp. 458 – 468

23 Ibid 6

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the same time they are not ready to purchase green product which says that it's donating a part to charity because they are not sure about that particular statement. Also they are not sure that whether the vegetables what they purchase is locally grown or not.

Findings and discussions:

- The study shows that there is no significant relationship exists between the demographic factors and the environmental concern. Thus it can be taken as the fact that demographic variable proved to be a poor predictor for environmental concern. In other sense, the result of the study can be taken in the sense that irrespective of the demographic factors, the selected respondents are concerned about the environment. But the fact is only few are acting towards safeguarding it.
- From the study it is also found out that marital status and occupation are the major deciding factors for the purchase behaviour of the respondents. Different occupations of the respondents expose them to different areas of the market and thus it plays a major role in the purchasing of green products. Married respondents will purchase the green products for the sake of their family and children. It is also seen from the study that retailers can concentrate on married respondents who are much worried about their children's and family's health. Health conscious respondents will tend to be the target if the green products are promoted in a right way. This is a contradictory study which does not show the difference on the basis of gender and their purchase behaviour. But this is supported by a study done recently by Chen and Chai (2010)[24] who found there is no significant difference among males and females in environmental attitude or green purchasing behaviour.

Conclusion:

The study shows the impact of demographic factors on environmental concern and purchase behaviour. From the study it is clearly understood that almost everyone is concerned about the

24 Chen, T.B. and L.T. Chai, 2010. Attitude towards the environment and green products: Consumers perspective. Manage. Sci. Eng., 4: 27-39

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environment irrespective of their demographics, but only few are really acting and participating in the process of green marketing. Efforts need to be taken from both respondents and the retailers to promote green products.

Future Scope:

The study was done in a narrow prospective by taking just the demographic factors and the influence of it in purchase behaviour and environmental concern. Future studies can be done in a wider area covering the respondents' attitude, environment knowledge and other predictor variables that determine the purchase behaviour.

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Prioritization of entrepreneurial marketing dimensions a case of in higher education Institutions by using entropy

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Abstract

One of the major benefits associated with entrepreneurial marketing concept is its ability to respond to the ever changing environment. Lack of attention to this concept can be a challenge for businesses. So present study aimed to prioritize aspects of entrepreneurial marketing in higher education institutions in Tehran.49 institutions were selected using random sampling and questionnaires were distributed among active managers of these institutions. The data were collected using questionnaires and using the Shannon entropy weighting and ranking of priorities was discussed. The results showed that the dimensions of entrepreneurial marketing in the statistical community have different priorities. So, to managers, the calculated risk taking dimension had the highest weight and priority and dimensions of value creation and customer intensity with little difference had the lowest weight and priority.

Keywords: entrepreneurial marketing, proactiveness, opportunity focus, value creation, entropy, higher education

1 INTRODUCTION

Changes and transformations of social - economic systems in this era rooted in science and technology progress and changes. Assurance and the survival of organizations need finding solutions and new ways of dealing with problems which very dependent on innovation, invent, create products, processes, and new methods. What has become increasingly apparent to researchers is that conventional marketing practices are not always available, or appropriate, for entrepreneurial firms. When pursuing new opportunities with limited resources, the entrepreneur must use innovative approaches in the face of these uncertainties (Becherer & et al., 2008) .Traditional marketing may not be adequate for firms to compete

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in this highly dynamic business environment. Recent studies propose firms to be more entrepreneurial in their marketing when dealing with market uncertainty and ambiguity. A growing collection of evidence suggests that the more successful companies over time are those that are involved in entrepreneurial activity in the higher levels. In their study of 59 firms from Sweden and the US, Hills et al. (2008) found that firms with entrepreneurial marketing orientation exhibit a different strategic orientation, commitment to opportunities; opportunity recognition would tend to use formal market research while entrepreneurial marketing firms tend to rely on experience, immersion and intuition. Further, entrepreneurial marketing firms are less constrained by budgets and have adaptive strategies whereas non- entrepreneurial marketing firms are more oriented to using budgets and top-down corporate planning driven by financial metrics. In this research we use seven dimensions of entrepreneurial marketing which was used by Becherer et al. (2008). In their research they examine how the use of entrepreneurial marketing varies as a result of the experience and motivations of the owner/operator and how the SME was started or acquired. But, in this research either we explain about every dimension or we examine and prioritize these dimensions in the training industry and among higher education institutions to understand what their priorities in higher education institutions are and to understand the importance of each of these dimensions. And help managers to focus on the most important ones, achieve their goals and thereby answer Latent demands and future demands in the best way and create a significant competitive advantage. So the main question of this study is what are the priorities of aspects of entrepreneurial marketing in higher education institutions?

2 LITERATURE REVIEW

2.1 Entrepreneurial Marketing

The importance of entrepreneurs and entrepreneurship are widely recognized. The entrepreneur has become a hero in recessionary times. And the ability to operate, and often also to grow, a business in a challenging business environment is important for society. So there is a need for scholarly studies of entrepreneurship and its intersections with other academic disciplines, such as marketing. The basic idea of linking Marketing and Entrepreneurship has been discussed for many years. Early authors linking the two fields together were, for example, Murray (1981) and Tyebjee et al. (1983). In the 90s, both education at various university levels and published research in entrepreneurial marketing (EM) grew significantly. We find more courses, conferences and symposia organized than ever before (Hills and Hultman, 2011). For many years, the American Marketing Association did not change their definition, but

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revisions were made in 1935, 1982 and 2004, and the latest modification came in 2007. The definition of marketing has evolved from being focused on performing business activities (1935) to focus on activities, institutions and processes for value-creating offerings. At the time of the first Marketing and Entrepreneurship Symposium in 1982, mainstream marketing, as defined by the American Marketing Association in 1981, was very different from discussions of entrepreneurial marketing. However, the gap has been reduced by the way the American Marketing Association changed the definition in 2004 and in 2007(Jones and Rowley, 2011). Review of existing research about marketing and entrepreneurship indicate that Knowledge of Marketing and Entrepreneurship has always been two attractive research areas for many researchers. So, On the one hand, raise awareness about the impact of entrepreneurship and innovation in Businesses and the role of marketing in obtaining of success in the other hand led to the combination of these two disciplines and creation of entrepreneurial marketing concept. Entrepreneurial marketing is described as the interface between entrepreneurship and marketing. Entrepreneurial marketing is very complex and is related to the highly competitive and dynamic environment (Hills and Hultman, 2006). This form of marketing tends to be responsive and reactive to competition and opportunistic in nature. Indeed, empirical evidence suggests that there exists a significant correlation between an enterprise's marketing and entrepreneurial orientations, both widely being responsible for corporate success (Jones and Rowley, 2011). In one of the most comprehensive discussions on entrepreneurial marketing to date, Morris et al. (2002) propose that entrepreneurial marketing is composed of a proactive organizational focus on customer satisfaction through innovative and efficient value creation throughout the value chain (Miles and Darroch,2004).

2.2 Dimensions of Entrepreneurial Marketing

2.2.1 Proactiveness

Bateman and Crant (1993), for example, argue that proactivity is a personal behavioural construct that exhibits a "relatively stable tendency to effect environmental change". Frese and Fay (2001) bring this further in proposing that proactivity will have a positive impact on individual as well as organizational performance. Given all this it is to be expected that proactivity will enhance organizational performance, also in terms of the working environment. Proactivity, in a working environment context, can be defined as a continuous organizational process that aims to anticipate, improve and evaluate occupational health and safety practices (Andersen et al., 2010). Proactiveness reflects entrepreneurial willingness to dominate competitors through a combination of proactive and aggressive moves, e.g., introducing new

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products or services ahead of competition and acting in anticipation of future demand to create change and shape the environment. Moreover, having a proactive orientation involves discovering and satisfying the latent, unarticulated needs of customers through collecting customer- and competitor-based information (Keh et al, 2007). Proactiveness is concerned with implementation of something new, doing what is necessary to anticipate and act upon an entrepreneurial opportunity.

2.2.2 Opportunity Focus

Recognition and pursuit of opportunity are marketing actions critical to SME success. Market potential is generally evaluated by degree of fit relative to the capabilities and resources of the firm. It is the ability of the firm to select the "right" opportunity that determines success (Becherer et al., 2008). Although opportunity can arise randomly, entrepreneurial marketers are known for proactively searching for new opportunities. Being forward looking and having the will to become pioneers makes entrepreneurial firms able to serve unsatisfied needs and capture emerging opportunities before their competitors can. Innovation and creativity are crucial tools that help entrepreneurial firms to turn opportunities into realities (Kilenthong et al., 2010).

2.2.3 Calculated Risk Taking

The power of risk taking including willing to using substantial resources for exploiting of opportunities with using Business strategies Based on the results may be very uncertain (Morris et al., 2004). Firms that have adopted entrepreneurial marketing processes take calculated, rational, measured risks. Firms that have adopted entrepreneurial marketing processes are not gamblers but risk accepters who understand that innovation in the current social, technological, and economic environments is inherently uncertain and requires rational betting on long shots. One method for managing risk is to work in alliance with other parties, which these firms believe will both provide complimentary capabilities and help shift the risks to other parties (Miles and Darroch, 2004).

2.2.4 Innovativeness

Innovation-focused marketing actions allow the firm to concentrate on new ideas that lead to new markets, products, or processes. The degree to which a successful organization emphasizes innovation in its market actions can range from the highly innovative new market creator to the incremental market builder. The market creator must break with past solutions to offer the customer a radically different value. The

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incremental innovator builds on existing customer relations and market knowledge. SMEs may choose to focus on innovative means of marketing since the firm may not have the resources to break with industry standards (Becherer et al., 2008). Entrepreneurial marketing entrepreneurs tend to be innovation-oriented (that is driven by ideas and intuition) rather than customer-oriented (driven by assessments of market needs) and tend to use informal networking rather than formalized research and intelligence systems (Morrish, 2011). Innovativeness refers to a firm's tendency to engage in creative processes, experimentation of new ideas, which may result in the institution of new methods of production and/or bringing new products or services to current or new markets. The innovativeness aspect of entrepreneurial orientation would promote change and creative behaviors, which encourage active exchange of ideas, increase information flows and novelty in new product development.

2.2.5 Customer Intensity

The dimension of customer intensity builds on what is often viewed as a central driving force of marketing in the organization: a "customer-centric" orientation employing innovative approaches to create, build, and sustain customer relationships. Many studies suggest successful organizations are those that place a greater emphasis on customer intensity. However, it has also been suggested that extreme customer orientations might inhibit the breakthrough of innovations that create markets and disrupt equilibrium, since these radical changes are out in front of customers (Becherer et al., 2008). Customer orientation has its roots in early services marketing literature in which the importance of customer-focused employees was a tangible sign of quality for the firm and its services. Since then, the concept of customer orientation within firms has been investigated by a number of authors and researchers; indeed, some authors view customer orientation as the 'pillar of marketing' (Jones and Rowley, 2011).

2.2.6 Resource Leveraging

One of the key challenges of marketing in new ventures is scarcity of financial and personnel resources. This scarcity demands a strict monitoring of marketing costs, and restricts the range and intensity of marketing activities a new venture is able to pursue. Entrepreneurs can either alleviate this problem by trying to acquire additional resources, such as venture capital or bank loans, or by trying to achieve a maximum effect of these scarce resources. Findings on this topic can be categorized in two groups: strategies and tactics for reducing the amount of resources that must be spent for particular marketing activities ("let others pay"); and strategies and tactics that require only few resources, yet have a high

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impact in the marketplace. Strategies and tactics for reducing the amount of resources spent for particular marketing activities include the free-riding strategy as well as the strategy of forming alliances with other organizations.

The second group of findings focuses on strategies and tactics that require only few resources yet promise to produce a high impact in the marketplace. These strategies/tactics include the adoption of a *niching strategy*, a *gradual "step by step" development* of marketing activities, and *low-cost "guerrilla" tactics* in marketing (Gruber, 2004). At its most basic level, leveraging means more work with less. Marketers must develop a capacity for resource leveraging. The ability to recognize an under-utilized resource, to see how a resource could be used in a non-conventional way, or to convince those that control a resource to let the marketer use it, requires insight, experience, and skill (Morris et al, 2004).

2.2.7 Value creation

The focal point of entrepreneurial marketing is innovative value creation, on the assumption that value creation is a prerequisite for transactions and relationships. The task of marketers is to discover untapped sources of customer value and to create unique combinations of resources to produce value (Morris et al, 2002). Because of the superior ability to identify and exploit opportunities, we argue that firms that adopt entrepreneurial marketing processes are better able to identify attractive entrepreneurial opportunities and exploit them by leveraging innovation to enhance the offering's benefits and/or decrease the offering's costs, resulting in a superior value for the customer (Miles and Darroch, 2004).

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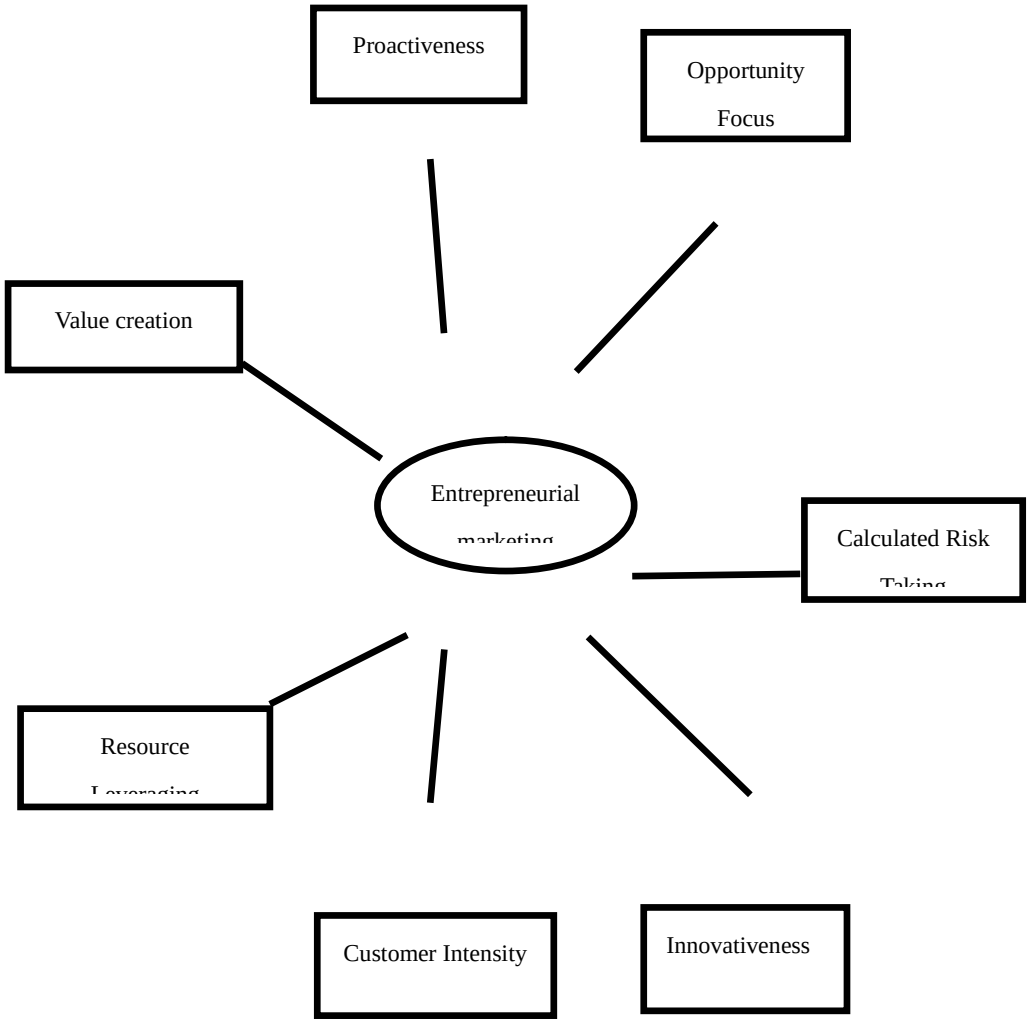

Fig. 1 - Seven dimensions comprising the conceptualization of entrepreneurial Marketing. Source: Adapted from Becherer, R. C., Haynes, P. J., Helms, M. M., (2008)

3 METHODOLOGY

A basic concept in the physical sciences, social sciences and systems is the entropy. Entropy represents the uncertainty arising from the content of a message. In other words, entropy in information theory is an index to measure the uncertainty that is expressed by a probability distribution (Shannon, 1984).

Building upon the pioneering work of Leo Szilard (1925/1972, 1929/1972), Shannon and Weaver (1949)

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developed what is now called information theory. This theory formalizes the intuitive idea of information that there is more "information" in rare events, such as winning the lottery, than in common ones, such as taking a breath. Shannon defined the entropy for a given system as the weighted average of the probability of occurrence of all possible events in the system. Entropy, used in this sense, is defined as a measure of our uncertainty, or lack of information, about a system (May et al., 1994). The entropy method is the method used for assessing the weight in a given problem because, with this method, the decision matrix for a set of candidate materials contains a certain amount of information. In other words, the entropy method works based on a predefined decision matrix. The entropy idea is particularly useful for investigating contrasts between sets of data .This method has its roots in information theory and was introduced in 1948 to provide a quantitative measure of the "uncertainty" represented by a discrete probability distribution. Entropy analysis is based on three measures: entropy (Ej), degree of divergence (dj), and degree of influence or weight of importance (wj) that this method consists of the following procedure: (Vazifedost and Taghipouryan, 2011).

Step 1: Normalizing the decision matrix:

$$p_{ij}=\frac{r_{ij}}{\sum_{i=1}^{m} r_{ij}} \qquad i = 1,2,\dots,i \qquad j = 1,2,\dots,j \qquad (1)$$

Step2: Calculating the entropy with data for each criterion, the entropy of the set of normalized outcomes of the *j*th criterion is given by:

$$E_j = -k \sum_{i=1}^{m}[p_{ij} \ln (p_{ij})] \qquad i = 1,2,\dots,i \quad j = 1,2,\dots,j \qquad (2)$$

Step 3: Weights of criteria:

$$D_j = 1 - E_j$$

$$W_j = \frac{d_j}{\sum_{j=1}^{n} d_j} \quad \forall j \qquad (3)$$

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4 RESULTS

In this research were used 7 dimensions of entrepreneurial marketing which was used by Becherer et al. (2008) included Proactiveness, Opportunity Focus, Calculated Risk Taking, Innovativeness, Customer Intensity, Resource Leveraging, and Value Creation. Respondents were asked to score their opinions about the importance degree of each dimension based on score of 1 to 100. To test the reliability of instrument, we computed Cronbach alpha coefficients. Although the ideal Cronbach alpha value of a scale should be above 0.7, the minimal Cronbach alpha value of 0.6 suggested by Robinson et al. (1991) was accepted (Hoare and Butcher, 2008). Cronbach's alpha for constructs are: Proactiveness: 0.728, Opportunity Focus: 0.724, Calculated Risk Taking: 0.764, Innovativeness: 0.779, Customer Intensity: 0.720, Resource Leveraging: 0.778, Value Creation: 0.750. The samples include active managers of higher education institutions of Tehran province in Iran. 103 questionnaires were completed and were ready for analyzing. The samples of 103 respondents were 56.3 percent male (n=58) and 43.7 percent female (n=45) and 61.2 percent were graduated (n=63) and 35 percent with MA degree (n=36) and 3.9 percent with Ph.D degree (n=4).

5 DISCUSSION AND CONCLUSION

The seven dimensions that comprise entrepreneurial marketing are not independent. Thus, risks may be mitigated through resource leveraging in the form of outsourcing, which in turn results in greater strategic flexibility. Innovation may be facilitated through resource leveraging in the form of a strategic partnership, but this might increase the firm's dependency on an outside party. In addition, not all of the dimensions need to be operating at once for entrepreneurial marketing to occur. The marketer could engage in significant innovation that redefines environmental conditions, involves high levels of customer intensity, and contains numerous risks, some of which the marketer is able to mitigate, but resources are not being leveraged. Stated differently, entrepreneurial marketing is a matter of degree, and various combinations of the underlying dimensions will result in marketing that is more or less, entrepreneurial (Morris et al, 2004).

To rank the dimensions of entrepreneurial marketing we used Shannon entropy. Results of the research have shown that these dimensions have different priorities among managers. Dimensions Weight is shown in Figure (2).

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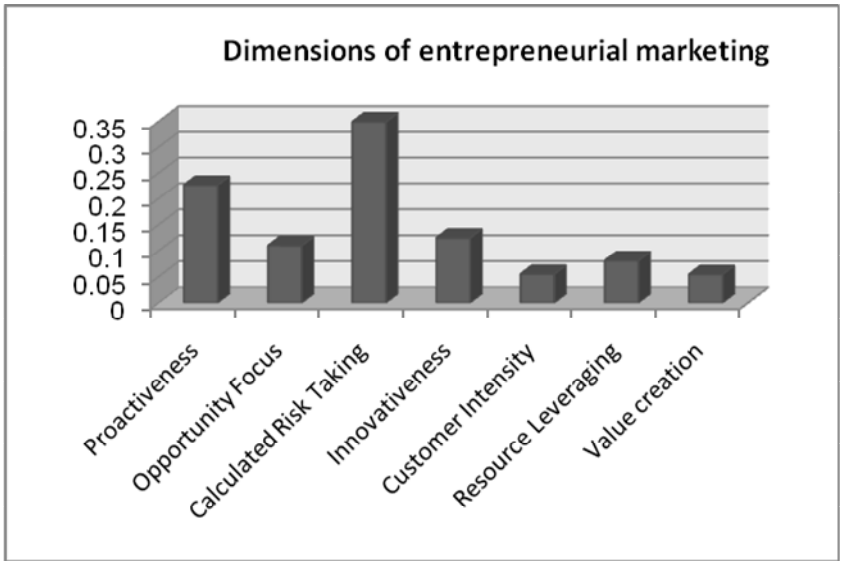

Fig. 2 - Weights of seven dimensions by Entropy. Source: Authors' research

As shown in Figure 2 Calculated Risk Taking dimension had the highest weight and priority and dimensions of value creation and Customer Intensity with little difference had the lowest weight and priority. Considering these results and considering the competitive environment, today, customer satisfaction is an important issue for organizations. Being a winner or loser is based on the percentage of customers that they have retained. This is why many scholars and researchers have continually stressed the importance of customer satisfaction. On the other hand, customer is one of the most important stakeholders in any organization because, without the customer, the organization probably will not succeed**.** Considering that reviewed institutions are among the service agencies and considering that in the Service Industry, Survival depends on customer satisfaction and create value for them, and considering that the two dimensions of customer intensity and value creation have the lowest priority and dimension of Calculated Risk Taking has the highest weight and highest priority so these institutions for survival and creating competitive advantage Should pay more attention to these dimensions and should implement some programs such as, recognizing the importance of satisfying their customers, and use Innovative ways to communicate with their customers, and consider Programs to communicate with customers, and create more value for them than their Competitors with the best services and the best values, providing superior customer value became a goal for them; create a good pricing structure in their institutions, and increase their risk taking power, and then use of less conservative styles. Using these programs and strategies can lead to achieving competitive advantage in education market. So, considering entrepreneurial marketing in higher education institutions can coordinate the challenges and limitations imposed by their environment and would show the best ways of achieving their missions and visions.

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Determining the Job Satisfaction Level of the Academic Staff at Tertiary Academic Institutes of Pakistan

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Abstract

Purpose: Purpose of this paper is to explore various factors that can affect on job satisfaction level of faculty and their possible extent through which these factors make work exciting and enjoyable for teachers to perform at university level. Several studies have been conducted previously but very few literature has been found in higher education sector especially in developing and under developed countries. As Pakistan is a developing country therefore, authors have tried to conduct this research in universities of Pakistan so that significant contribution could be made in this regard.

Methodology: Authors have deeply searched previous studies of researchers and through scores of secondary information variables have been extracted to view the underlying concept clearly. For conducting this primary research authors have selected four reputed universities of Pakistan and have used both questionnaires and interviews as data collection instruments from the target population. Target population is faculty members of case study universities and authors have collected data by drawing sample of this vast population.

Findings: Authors have analyzed data by using simple means. It is revealed through results that the factor that got highest mean score is job security which means that job security largely increase job satisfaction of an employee whereas the factor that has got lowest mean score is availability of fringe benefits to faculty members.

Contribution: This study can be proved fruitful for policy makers and strategists of academic institutes. The major beneficiaries could be faculty members of academic institutes and management of higher education system.
Keywords: job satisfaction level, theories of job satisfaction, indicators affecting job satisfaction of employees.

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1. Introduction

Students are one of the precious assets of any academic institute. Well-being of any society depends upon its students because these are the one who will take the responsibility of success of the society in the future and teachers also play very important role in achieving this goal. They are the source of guidance at many crucial steps in academic life. Teachers are not only the source of knowledge for the students but they also provide the guidance to their students to choose the right path for their career. When teachers are satisfied with their job they can perform their responsibilities with more concentration, devotion and competence.

There are a number of research papers; thesis and other published work available on measuring job satisfaction level of faculty members which shows the importance of this concept. According to the Clark (1996), Managers, human resource specialists, supervisor and workforce itself are involved in exploring the ways that how job satisfaction of employees can be improved. Similarly, numerous articles and monographs have been published by the economists that explore the determinants of job satisfaction and outcomes of labor market (Bender & Heywood, 2000). A wide variety of literature is available on this topic.

Physical and mental health also depends upon the job satisfaction level of the employees. Job satisfaction plays vital role in the well-being of the workers (Oshangbemi, 1999). The well-being of the employees can be improved by understanding the factors such as pay, promotion opportunities, support of research, support of teaching, fringe benefits, which have significant impact on job satisfaction (Alam et al., 2005).

According to the Santhapparaj and Alam (2005) if the workers are satisfied with their job then they will be more productive and they will remain in the organization for the longer period of time. That is the reason to give importance to this concept because the ultimate goal of any organization is to increase the productivity as well as returns in long run.

Similarly, Ozdemir (2009) quoted in his research paper that the employees want to be a part of that organization for a longer time period where they have maximum job satisfaction and they also shows greater productivity while performing their jobs and vice versa. From the determinants of job satisfaction it is indicated that older and the youngest employees have a higher job satisfaction (Clark, Oswald and Warr, 1996). According to the Clark (1997) and Sousa-Poza (2000) women have a greater job satisfaction than men.

As major aim of conducting this research is to explore maximum factors that may increase or decrease employee job satisfaction. Moreover, through analysis of results authors want to measure the extent to which various factors affect satisfaction level of faculty members. This study is useful for the management of higher education system as this study is conducted mainly at universities. Authors have analyzed the primary data collected and several useful suggestions and recommendations are given for improvement of staff satisfaction level. If teachers become satisfied from their job then they can perform better and immediate beneficiaries of this would be students. Thus overall quality of

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education delivered can be increased in this way.

2. Literature Review

2.1 Definitions of Job Satisfaction

Job satisfaction is a momentous concept in any work environment so attention is paid by many researchers. Job satisfaction has various definitions. Generally job satisfaction can be defined as a positive or negative feeling that the workers feel about their work (Locke, 1976; Odom, Boxx, and Dunn, 1990). It is the satisfaction of the employees about the general aspects of job like pay, promotion, relationship with management, job itself, and progression in the job etc. (Noordin and Jusoff, 2009). Job satisfaction of an employee can also be defined as an encouraging emotional condition resulting from the work (Locke, 1976; Spector, 1997). A positive emotional state that gives the feeling of happiness to the employees when they complete their work is called job satisfaction.

There are different researchers who define job satisfaction in different manner. As according to Robbins (2003) job satisfaction of an employee is his individual common attention or attitude toward his job. The attitude can be positive or negative. The individuals who have positive attitude towards their jobs are more satisfied with their jobs as compared to the individuals who have negative attitude. We can say that the employees are satisfied with their job if they have the positive attitude and are dissatisfied with their job if they have negative attitude towards it.

Lawler (1973) defines that job satisfaction has only one-dimension. Employees are either happy or unhappy with the work. According to this researcher job satisfaction has only one dimension, employees are either satisfied or dissatisfied with their work. If they are satisfied with their work they will be happy and if they are dissatisfied they will be unhappy from their work. There is no third option at any work place according to him.

In contrast to the above mention statements, other scholars as Smith, Kendall and Hulin (1969) described that job satisfaction is multi-dimensional, Employee might be more satisfied or less satisfied with the factors that affect their jobs i.e. Someone might be more satisfied with compensation but less satisfied with the supervisor or promotion opportunities.

There are many factors that affect the satisfaction level of the employees and in the point of view of these researcher job satisfaction has more than one dimension. Satisfaction of any employee might ranges from strongly satisfied to strongly dissatisfied. If someone is strongly satisfied with working environment of the organization it doesn’t mean that he or she is also satisfied with salary offered or with his coworkers. He or she may or may not be satisfied with the other factors (Smith, Kendall and Hulin, 1969).

So at the same time someone could be satisfied with the one factor like promotion opportunities or salary and could be dissatisfied with the other factors like support for research or recognition or any other factor.

Similarly, Baloch (2009) quoted in his research paper that job satisfaction is the state of mind of any employees which is pleasurable for him or her. These are all the definitions quoted by the previous

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researcher in their research papers. These all shows that how much literature is available on this topic and how much important concept it is at any work setting.

2.2 Theories of Job Satisfaction

There are many theories related to job satisfaction with the help of which we can understand this concept in more detail. Following are the theories of job satisfaction that affect the job satisfaction level of the academicians;

2.2.1 Discrepancy Theory

Discrepancy theory was presented by the Locke (1969). According to discrepancy theory the difference between the actual outcome and excepted outcome tells us about the satisfaction level of the employee (Lawler, 1973). It means that if the actual outcomes of the employees are matched with the expected outcomes then their satisfaction level would be high but if the actual outcomes are lower than the expected one then the satisfaction level will be low.

2.2.2 Equity Theory

Equity theory was presented by Mowday (1992). According to equity theory employees compare their participation and production with the other individuals. If the ratio of one employee equal to the other, the individual might be more pleased with his or her job (Mowday, 1992). Equity is linked with satisfaction and inequity with dissatisfaction. It means that employees compare their input/output ratio like the number of hour they work with the wages that their peers obtained after the same amount of work if they find it equal they feel more satisfied. On the other hand if there is any inequity then they feel dissatisfied. Hence, equity is associated with the job satisfaction.

2.2.3 Motivator-Hygiene Theory

This theory is presented by Herzberg et al. in 1959. According to them there are many factors at any workplace that are related to the job satisfaction or job dissatisfaction. The factors that are linked to the job satisfaction are recognized as "motivators" and the factors which results in job dissatisfaction are known as "hygiene".

According to the Herzberg et al. (1959) following are *Motivators*:

Work Itself: Work itself is basically is the nature of the job or actual job that the employees have to perform. It must be according to personality of individuals. For example for an extrovert person marketing job is best suitable same is the case with teachers. If a person have the ability to clear his or her point of view in front of all other individual so the teaching profession would be suitable for him or her.

Therefore, if the actual work fits well with individual personality traits that person would be more satisfied with the job.

Recognition: Gratitude or appreciation that an employee want to obtained from the employer, other

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superiors personalities in the organization, supervisors, peers, the society in common or from the general public is known as recognition. Same is the case in higher education the praise that the teachers obtained from their chair person or dean is recognition which may enhance satisfaction level of employees.

Achievement: The success or accomplishment that the individuals get from their career is called achievement. Higher the level of the achievement more will be the satisfaction level of the employees.

Responsibility: Accountability that employees have in their work environment. It is also related to the satisfaction level of the teachers.

Advancement: Advancement is the change in the actual job duties. The progression or improvement in the actual job duties is called advancement. This thing can improves satisfaction level of faculty members.

Following are the *Hygiene Factors*:

Salary: It is the amount of money that the employees get on regular basis. It is offered on monthly basis in most cases. According to this theory lower level of salary could be a factor of dissatisfaction at work setting.

Supervision: The role of supervisor is also of major importance at workplace. If the supervisor delegate authority and duties according to the interest of the person it adds in the satisfaction level of that person otherwise it leads towards dissatisfaction.

Policy and Administration: Policies that are followed in any organization and in case of education policies followed at institutions and universities or any other administrative actions can also results in satisfaction or dissatisfaction of the employees working under those policies.

Working Conditions: Physical work setting and other facilities that create the environment for workers is called working conditions. Working conditions are very important to perform duties efficiently and effectively. For example if there is lot of noise outside the classroom, it will turn away the attention of teacher as well as the students and their effectiveness would decline. If the working conditions are good then employees feel satisfied with their job otherwise vice versa.

Interpersonal Relations: Relationship of the workers with the supervisor, peers, subordinates and other individuals in the organization is the interpersonal relations. It is another indicator for satisfaction or dissatisfaction.

Herzberg et al. (1959) identified these factors but their description in the scenario of education is provided by the Padilla-Veles (1993).

2.3 Integration of Job Satisfaction with Other Practices

Job satisfaction has relationship with other concepts used at any organization like motivation, commitment and work-life balance, performance and productivity etc.

2.3.1 Work-Life Balance and Job Satisfaction

According to Malik et al. (2009) there is a momentous relationship between job satisfaction of the employees and the work-life balance (WLB). If there is WLB in the life of the employees they are

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definitely satisfied with their work and the duties they perform. Higher WLB will results in higher job satisfaction according to them and female employees are more satisfied in comparison of male staff. Eikhof et al. (2007) indicated that proper WLB is a crucial need of this era because it helps the employees to mold their attitude according to the work environment and daily life activities. WLB is balancing the work and non-work activities and the capability of the employees to perform job by creating balance between it (Moore, 2007)

2.3.2 Motivation and Job Satisfaction

Motivation is another important concept at workplace and it has a clear relationship with job satisfaction. Bishay (1996) quoted in his research paper that there is significant affiliation between motivation and job satisfaction. As motivation is the willingness to do any work so if the individuals are satisfied with their jobs, they are more motivated to do their jobs and vice versa. That's why motivation and job satisfaction has clear relationship. At the same time Noordin and Jusoff (2009) also indicated about the significant association of the job satisfaction and employee motivation. Higher job satisfaction leads towards the higher motivation of the academic staff.

2.3.3 Commitment and Job Satisfaction

According to the Tella et al. (2007), encouraging link exists between job satisfaction and organizational commitment. It means that if the employees have higher level of job satisfaction, their commitment to their organization will be higher. Organizational commitment is defined as loyalty of employees with their organization or the willingness to put their maximum effort for success of their organization (Bateman & Strasser, 1984). Similarly, job satisfaction has a considerable and significant impact on commitment of workers with organization which results in lower turnover and absenteeism rate (Noordin and Jusoff, 2009). Thus high job satisfaction could leads towards high organizational commitment.

2.3.4 Performance and Job Satisfaction

According to the Baloch (2009), job satisfaction has a significant impact over productivity and profitability of organization. It means higher is the job satisfaction higher would be performance of employees in terms of profitability and productivity.

It is added that job satisfaction has a great influence on the working behavior and the productivity of work along with turnover and absenteeism rate of employees. Due to this fact job satisfaction has a great importance for both employees and employers. Similarly, Noordin and Jusoff (2009) indicated that a considerable association exists between the satisfaction level of teachers and job performance. Both are directly related to each other according to them.

2.4 Variables That Affect Job Satisfaction

2.4.1 Salary

Material rewards are much essential in job satisfaction. Along with the primary wants material goods meets luxury desires and wishes of people (Ozdemir, 2009). According to many researchers a direct relation exists between salary and job satisfaction of employees. Increase in one thing must improve the other. As identified by Souza-Poza (2000), salary is a forecaster of work satisfaction and according

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to Miller (1980) workers showed a better job satisfaction who were rewarded vastly.

2.4.2 Promotion opportunities

Ozdemir (2009) discussed that promotion opportunities can affect satisfaction level of the employees in the different manner because of the existence of a number of promotion strategies which varies to organization to organization. He added that satisfaction level of the employees who are promoted on the basis of seniority is different than the employees promoted on the basis of performance.

2.4.3 Working Conditions

As determined by Herzberg et al. (1959) working conditions are a chief factor that effect level of job satisfaction. A significant connection is present in the job satisfaction and working condition (Santhepparaj & Alam, 2005). Job satisfaction can be increased by improving the working environment (Onu et al., 2005). Female staff found to be more satisfied with the working conditions than the male staff at the university level (Alam et al., 2005; Santhepparaj & Alam, 2005).

2.4.4 Job Security

Lacy & Sheehan (1997) indicated that clear relationship exists in job security and satisfaction with work. Another predictor of job satisfaction is security of services. Security of service is a feature that has a considerable affiliation with the job satisfaction (Siddique et al., 2002). Permanent employees are more pleased with their jobs in comparison to the employees who are on temporary basis.

2.4.5 Management support

Baloch (2009) indicated the existence of a constructive relationship between the supervision and job satisfaction of workers. It is contributed by the Billingsley & Cross (1992) that satisfaction with the supervision provided at workplace to employees and with the management leads towards the satisfaction with the jobs. Similarly, if the supervisor provide assistance and co-operate with the worker in accomplishing the assigned task then it must results in higher satisfaction (Ting, 1997).

3. Methodology

Authors have taken four universities of Pakistan for the sake of conducting primary research. The target population includes all faculty members of case study universities from which authors have taken out sample through convenience sampling technique. Both questionnaires and interviews are floated to collect data from the respondents. The data is then analyzed by using SPSS software and by applying simple means. In order to measure the results, various factors or variables have been identified by the prior studies of previous researchers. 4-point Likert scale (1=strongly disagree to 4=strongly agree) has been developed to explore the responses of faculty members. The respondents are asked to tell their views regarding extent of impact of various factors on their job satisfaction level. Various statements are discussed below and the corresponding values of means are also mentioned in table 1.

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4. Findings And Discussion

Factors	Mean Scores
Effect of job security on job satisfaction	3.96
Effect of management and co-workers support on job satisfaction	3.81
Effect of salary on job satisfaction	3.79
Effect of promotion opportunity on job satisfaction	3.68
Effect of working condition on job satisfaction	3.63
Effect of fringe benefits on job satisfaction	3.58

Table 1

As the results indicate that the highest mean score of 3.96 belongs to the statement that job satisfaction of an employee is highly affected by sense of job security. Most of the respondents agree with the statement. Respondents revealed in their interviews that job security is essential for their proper and effective working. As employees feel relaxed and considered themselves as a permanent part of organization therefore they feel satisfied and happy with their job and as well as with organization. However those faculty members who were on probationary period or who were on contractual basis were arguing that due to temporary nature of job they feel tensed and under-pressure of losing their jobs. Due to this factor their satisfaction level declines sharply.

The second highest mean score of 3.81 belongs to the statement that management and co-workers support largely impacts on satisfaction level of employees. Respondents revealed in their interviews that supervisors help and support is required every time. Not only new faculty members need support formally and informally but also senior faculty members require the same. Respondents further discussed that novelty of ideas, creativity in teaching, use of new technology during teaching and application of new methods all could be possible only if management is supportive and cooperative. Teachers also discussed that provision of resources for delivering quality education to students is also primary responsibility of superiors. Moreover superiors' role in creating work-life balance for their subordinates is also highly important. Respondents also throw light upon behavior of co-workers at workplace. They discussed that team working can make work both efficient and effective besides employees working on individual basis. This thing makes teachers more satisfied and pleased with their job.

Third highest mean score of 3.79 belongs to the factor salary. Many respondents agree to the

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statement that appropriate amount of salary increase their job satisfaction. A respondent revealed in their interviews that adequate amount of salary is highly important to keep one boosted and motivated to perform job to the fullest. Respondents further added that a teacher has to perform three important functions. He has to teach, conduct research, and ahs to look upon the administrative functions as well. There is a lot of work pressure on teacher's shoulders and they have to perform many tasks on deadlines as well. Therefore if they are rewarded with lesser amount of salary then employees' motivation level decline and their satisfaction level also turned down badly.

Fourth and fifth highest mean score of 3.68 and 3.63 belongs to the statements that there is impact of promotion opportunity and working condition on satisfaction level of employees. Respondents described during their interview that mostly promotion opportunities are based on seniority or length of service and it also depends largely on advancing level of education. Respondents further discussed that working conditions are mostly favorable and almost all of the respondents seems satisfied with their working environment. Thus this shows that at average level promotion opportunities and working conditions somehow impacts on job satisfaction level of employees.

The least mean score of 3.58 belongs to the statement that fringe benefit impact on job satisfaction. Respondents revealed that they receive fringe benefits as housing allowances and medical allowances, travel allowance. Respondents described that on contractual or temporary basis these benefits are not given separately to the employees however these are part of composite salary. But as a teacher gets permanent these benefits are granted to him according to the scale or level of job he possesses. Availability of fringe benefits does impact on job satisfaction of employees that can guarantee their long term commitment to the organization.

5. Conclusion And Recommendations

As this study is designed to find out those factors that highly impacts on job satisfaction level of faculty members. Authors have conducted primary research on higher education sector and has collected and analyzed data. It is hence concluded from the findings that according to faculty members of universities the factor that largely effects on job satisfaction level of employees is job security and the least important factor that has minor impact on satisfaction level of employees is availability of fringe benefits. In light of this authors have come up with following useful suggestions and recommendations for the management of universities that could be helpful if they consider these while devising and applying policies.

- Management must support their staff in performing their day to day work and in providing opportunities for work.
- Management must also provide required resources to their staff so that they could perform their work properly.

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- Management must try to inoculate such environment that foster team working. They must provide collective working opportunities to staff so that teachers must not act as competitors to each other instead help each other in completing work effectively and efficiently.
- Management must also introduce such policies of promotion and compensation that rewards merit and performance. Staff must be given performance based benefits so that good performers can be rewarded and similarly promotions must also be tied with level of performance not just length of service in university.
- Policies must be made to provide job security to the employees.
- Management must maintain friendly working environment for their employees.

Thus by keeping above mentioned suggestions in consideration both employers and employees could creep benefits and overall quality of education can be raised.

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STUDENTS BEHAVIOR MONITORING WITH AUTOMATIC SMS ALERT

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ABSTRACT:

There is no Tracking of the Children's and the Parents do not have any control over their children. They do not have any Track of the students Mobiles also. The student's presence would be send as SMS to the Parents immediately that day itself on a Daily Basis. Every Student would be provided with RFID Authentication. The modification along with the RFID Student Attendance System Students Mobile number Log Tracking is also carried out and Automatic Alert SMS is send to the Parents. If one student is speaking to another number for more than 5 mins, call would be disconnected as well automatic Alert SMS is send to the Parents. Dialing / Receiving Calls for more than 5 times a day to / by a particular

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number will also send an automatic Alert SMS to the Parents. Sending / Receiving SMS for more than 5 Times to / from Number will also send Alert SMS to the Parents.

Keywords: Android , Radio Frequency Identification (RFID).

1. INTRODUCTION:

An autonomous and collaborative RSS fingerprint collection and localization system. Mobile users track their position with inertial sensors and measure RSS from the surrounding access points. Several issues should be considered for the practical use of the RSS fingerprint-based localization. In particular, constructing a high-quality RSS fingerprint map is an essential part of the system since localization accuracy highly depends on fingerprint quality. The RSS map-building process typically requires an extensive and thorough site surveying, usually done manually with specific hardware and software tools. Much effort has recently been given to reducing the cost and complexity of fingerprint map building.

Android is made up of several necessary and dependent parts, including the following. A hardware reference design that describes the capabilities required for a mobile device to support the software stack. A Linux operating system kernel that provides low-level interface with the hardware, memory management, and process control, all optimized for mobile devices. Open-source libraries for application development, including SQLite, WebKit, OpenGL, and a media manager. A run time used to execute and host Android applications, including the Dalvik virtual machine and the core libraries that provide Android-specific functionality. The run time is designed to be small and efficient for use on mobile devices. An application framework that agnostically exposes system services to the application layer, including the window manager and location manager, content providers, telephony, and sensors. A user interface framework used to host and launch applications. Preinstalled applications shipped as part of the stack.

2. LITERATURE SURVEY:

2.1. Enloc: Energy-Efficient Localization For Mobile Phones

A growing number of mobile phone applications utilize physical location to express the context of information. Most of these location-based applications assume GPS capabilities. Unfortunately, GPS incurs an unacceptable energy cost that can reduce the phone’s battery life to less than nine hours. Alternate localization technologies, based on WiFi or GSM, improve battery life at the expense of localization accuracy. This paper quantifies this important tradeoff that underlies a range of emerging services. Driven by measurements from Nokia N95 phones, we develop an energy-efficient localization framework called *EnLoc*. The framework characterizes the optimal localization accuracy for a given energy budget, and develops prediction based heuristics for real-time use. Evaluation on traces from real users demonstrates the possibility of achieving good localization accuracy for a realistic energy budget.

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2.2. A Probabilistic Approach to WLAN User Location Estimation

We estimate the location of a WLAN user based on radio signal strength measurements performed by the user's mobile terminal. In our approach the physical properties of the signal propagation are not taken into account directly. Instead the location estimation is regarded as a machine learning problem in which the task is to model how the signal strengths are distributed in different geographical areas based on a sample of measurements collected at several known locations. We present a probabilistic framework for solving the location estimation problem. In the empirical part of the paper we demonstrate the feasibility of this approach by reporting results of field tests in which a probabilistic location estimation method is validated in a real-world indoor environment.

2.3. Growing an Organic Indoor Location System

Most current methods for 802.11-based indoor localization depend on surveys conducted by experts or skilled technicians. Some recent systems have incorporated surveying by users. Structuring localization systems "organically," however, introduces its own set of challenges: conveying uncertainty, determining when user input is actually required, and discounting erroneous and stale data. Through deployment of an organic location system in our nine-story building, which contains nearly 1,400 distinct spaces, we evaluate new algorithms for addressing these challenges. We describe the use of Voronoi regions for conveying uncertainty and reasoning about gaps in coverage, and a clustering method for identifying potentially erroneous user data. Our algorithms facilitate rapid coverage while maintaining positioning accuracy comparable to that achievable with survey-driven indoor deployments.

2.4. Place Lab: Device Positioning Using Radio Beacons in the Wild

Location awareness is an important capability for mobile computing. Yet inexpensive, pervasive positioning—a requirement for wide-scale adoption of location-aware computing—has been elusive. We demonstrate a radio beacon-based approach to location, called Place Lab, that can overcome the lack of ubiquity and high-cost found in existing location sensing approaches. Using Place Lab, commodity laptops, PDAs and cell phones estimate their position by listening for the cell IDs of fixed radio beacons, such as wireless access points, and referencing the beacons' positions in a cached database. We present experimental results showing that 802.11 and GSM beacons are sufficiently pervasive in the greater Seattle area to achieve 20-30 meter median accuracy with nearly 100% coverage measured by availability in people's daily lives.

2.5. Self-Cleansing Systems for Intrusion Containment

In this paper, we discuss the application of high availability computing systems to intrusion containment. Intrusion Management Systems (IMS) serve to protect complex computer systems from unauthorized intrusions. The traditional IMS approaches rely on intrusion prevention and detection, followed by implementation of intrusion resistance procedures. A key assumption of a traditional IMS is that it is possible to detect all intrusions. We believe that the sophistication and rapid evolution of information warfare require the more pessimistic assumption that undetected intrusions will occur and

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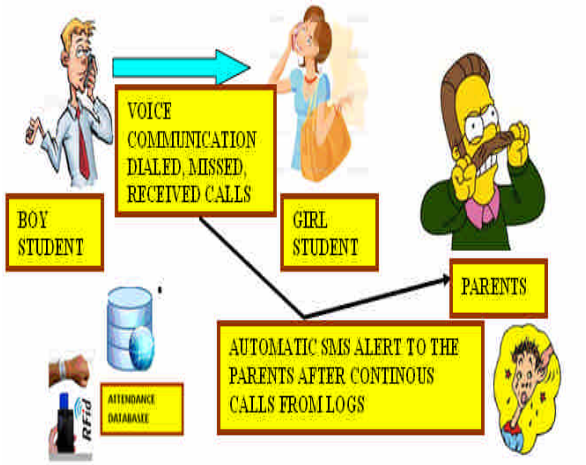
must be guarded against as well. Our approach, called *Self-Cleansing Intrusion Tolerance* (SCIT), pushes the concept of high-availability computing one step further. In a SCIT system, a server is periodically assumed to have "failed," namely, comprised by undetected intrusion. Consequently, the server is brought off-line for cleansing and integrity checking while a backup takes over. Indeed, it is more appropriate to see a SCIT system as two mirror servers working alternatively than as a primary server and its backup. In this paper, we define the concept of SCIT, present our experiences in building a SCIT firewall prototype, and discuss the future work in more advanced SCIT servers.

3. ARCHITECTURE DIAGRAM:



A modular design reduces complexity, facilities change (a critical aspect of software maintainability), and results in easier implementation by encouraging parallel development of different part of system. Software with effective modularity is easier to develop because function may be compartmentalized and interfaces are simplified. Software architecture embodies modularity that is software is divided into separately named and addressable components called modules that are integrated to satisfy problem requirements. Modularity is the single attribute of software that allows a program to be intellectually manageable. The five important criteria that enable us to evaluate a design method with respect to its ability to define an effective modular design are: Modular decomposability, Modular Comps ability, Modular Understandability, Modular continuity, Modular Protection. The following are the modules of the project, which is planned in aid to complete the project with respect to the proposed system, while overcoming existing system and also providing the support for the future enhancement

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- MOBILE CLIENT
- CALL MONITORING
- SMS MONITORING
- CALL DURATION MONITORING
- ILEGAL WEBSITE BLOCKING
- AUTOMATIC SMS ALERT

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3.1. Mobile Client:

An Android mobile client is an application that access a service made available by a server. The server is often (but not always) on another computer, in which case the client accesses the service by way of a network. The term was first applied to devices that were not capable of running their own stand-alone programs, but could interact with remote computers via a network.

To send the request to the server, the students have to be an registered person in the server. The students have to submit their students name password and another details to the server during the registration phase. All this information is stored in the database via server for future purpose.

3.2. Call Monitoring:

The server will monitor all the calls that are coming to the students' mobile phone. If the students receives more than the specified number of calls from the same number, an automatic updation in the database will occur regarding the calls that they've received. So that server may able to know that concerned students is receiving more number of messages from the same number mobile.

3.3. SMS Monitoring:

In this module, the server will monitor the messages that are received the students, so that if they receive more than the specified number of messages, the server will keep track of the number and update that number in the database. So that server may able to know that concerned students are receiving more number of call from the same number mobile.

3.4. Call Duration Monitoring:

In this module, the server will monitor the call duration of the phone calls received the students, so that if they speak more than the specified time of the call duration, the server will keep track of the number and update that mobile number in the database. So that server may able to know that concerned students are speaking to the particular number more than the specified time period.

3.5. Ilegal Website Blocking:

In this module, we'll block the students from illegal website. So that the illegal website are blocked from students accessing. If the students are accessing the illegal website an automatic SMS alert will be send to the concerned parents' mobile number.

3.6. Automatic SMS Alert:

If the particular students receives the more number of calls and messages than the specified number an automatic SMS alert will be triggered and send to the concerned student's parent's mobile number. To implement this module, a nokia express music mobile is connected with the server via data cable. Once the SMS is generated, it will be passed to the mobile connected to the server and that mobile transmits that message to the specified parents' mobile number.

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4. IMPLEMENTATION

5.

This describes the requirement analysis in accordance with the input and the resources and it also describes the implementation of the project with the technology used.

4.1. Requirement Analysis

Requirement analysis determines the requirements of a new system. This project analyses on product and resource requirement, which is required for this successful system. The product requirement includes input and output requirements it gives the wants in term of input to produce the required output. The resource requirements give in brief about the software and hardware that are needed to achieve the required functionality.

4.2. Android Operation System

Android is an operating system based on Linux with a Java programming interface. It provides tools, e.g. a compiler, debugger and a device emulator as well as its own Java Virtual machine (Dalvik Virtual Machine - DVM). Android is created by the Open Handset Alliance which is lead by Google.

Android uses a special virtual machine, e.g. the Dalvik Virtual Machine. Dalvik uses special bytecode. Therefore you cannot run standard Java bytecode on Android. Android provides a tool "dx" which allows to convert Java Class files into "dex" (Dalvik Executable) files. Android applications are packed into an .apk (Android Package) file by the program "aapt" (Android Asset Packaging Tool) To simplify development Google provides the Android Development Tools (ADT) for Eclipse . The ADT performs automatically the conversion from class to dex files and creates the apk during deployment.Android supports 2-D and 3-D graphics using the OpenGL libraries and supports data storage in a SQLitedatabase. Every Android applications runs in its own process and under its own userid which is generated automatically by the Android system during deployment. Therefore the application is isolated from other running applications and a misbehaving application cannot easily harm other Android applications.

4.2.1. Important Android components

An Android application consists out of the following parts:

- Activity - Represents the presentation layer of an Android application, e.g. a screen which the user sees. An Android application can have several activities and it can be switched between them during runtime of the application.
- Views - The User interface of an Activities is build with widgets classes which inherent from "android.view.View". The layout of the views is managed by "android.view.ViewGroups".
- Services - perform background tasks without providing an UI. They can notify the user via the notification framework in Android.
- Content Provider - provides data to applications, via a content provider your application can share data with other applications. Android contains a SQLite DB which can serve as data provider

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- Intents are asynchronous messages which allow the application to request functionality from other services or activities. An application can call directly a service or activity (explicit intent) or ask the Android system for registered services and applications for an intent (implicit intents). For example the application could ask via an intent for a contact application. Application register themself to an intent via an IntentFilter. Intents are a powerful concept as they allow to create loosely coupled applications.
- Broadcast Receiver - receives system messages and implicit intents, can be used to react to changed conditions in the system. An application can register as a broadcast receiver for certain events and can be started if such an event occurs.

Other Android parts are Android Widgets or Live Folders and Live Wallpapers . Live Folders display any source of data on the homescreen without launching the corresponding application.

4.2.2. Security and permissions

Android defines certain permissions for certain tasks. For example if the application want to access the Internet it must define in its configuration file that it would like to use the related permission. During the installation of an Android application the user get a screen in which he needs to confirm the required permissions of the application.

4.2.3. AndroidManifest.xml

An Android application is described the file "AndroidManifest.xml". file must declare all activities, services, broadcast receivers and content provider of the application. It must also contain the required permissions for the application. For example if the application requires network access it must be specified here. "AndroidManifest.xml" can be thought as the deployment descriptor for an Android application.

The "package" attribute defines the base package for the following Java elements. It also must be unique as the Android Marketplace only allows application for a specfic package once. Therefore a good habit is to use your reverse domain name as a package to avoid collisions with other developers. "android:versionName" and "android:versionCode" specify the version of your application. "versionName" is what the user sees and can be any string. "versionCode" must be an integer and the Android Market uses this to determine if you provided a newer version to trigger the update on devices which have your application installed. You typically start with "1" and increase this value by one if you roll-out a new version of your application. "activity" defines an activity in this example pointing to the class "de.vogella.android.temperature.Convert". For this class an intent filter is registered which defines that this activity is started once the application starts (action android:name="android.intent.action.MAIN"). The category definition (category android:name="android.intent.category.LAUNCHER") defines that this application is added to the application directory on the Android device. The @ values refer to resource files which contain the actual

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values. This makes it easy to provide different resources, e.g. strings, colors, icons, for different devices and makes it easy to translate applications. The "uses-sdk" part of the "AndroidManifest.xml" defines the minimal SDK version your application is valid for. This will prevent your application being installed on devices with older SDK versions.

4.2.4. R.java, Resources and Assets

The directory "gen" in an Android project contains generated values. "R.java" is a generated class which contains references to resources of the "res" folder in the project. These resources are defined in the "res" directory and can be values, menus, layouts, icons or pictures or animations. For example a resource can be an image or an XML files which defines strings.If you create a new resources, the corresponding reference is automatically created in "R.java". The references are static int values, the Android system provides methods to access the corresponding resource. For example to access a String with the reference id "R.string.yourString" use the method getString(R.string.yourString)); Please do not try to modify "R.java" manually.While the directory"res" contains structured values which are known to the Android platform the directory "assets" can be used to store any kind of data. In Java you can access this data via the AssetsManager and the method getAssets().

4.2.5. Activities and Layouts

The user interface for Activities is defined via layouts. Layouts are at runtime instances of "android.view.ViewGroups". The layout defines the UI elements, their properties and their arragement. UI elements are based on the class "android.view.View". ViewGroup is a subclass of View A and a layout can contain UI components (Views) or other layouts (ViewGroups). You should not nestle ViewGroups to deeply as this has a negativ impact on performance. A layout can be defined via Java code or via XML. You typically uses Java code to generate the layout if you don't know the content until runtime; for example if your layout depends on content which you read from the internet.

XML based layouts are defined via a resource file in the folder "/res/layout". This file specifies the view groups, views, their relationship and their attributes for a specific layout. If a UI element needs to be accessed via Java code you have to give the UI element an unique id via the "android:id" attribute. To assign a new id to an UI element use "@+id/yourvalue". By conversion this will create and assign a new id "yourvalue" to the corresponding UI element. In your Java code you can later access these UI elements via the method findViewById(R.id.yourvalue). Defining layouts via XML is usually the preferred way as this separates the programming logic from the layout definition. It also allows to define different layouts for different devices. You can also mix both approaches.

4.2.6. Activities and Lifecyle

The operating system controls the life cycle of your application. At any time the Android system may stop or destroy your application, e.g. because of an incoming call. The Android system defines a life cycle for an activities via pre-defined methods. The most important methods are:

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- onSaveInstanceState() - called if the activity is stopped. Used to save data so that the activity can restore its states if re-started
- onPause() - always called if the Activity ends, can be used to release ressource or save data
- onResume() - called if the Activity is re-started, can be used to initiaze fields

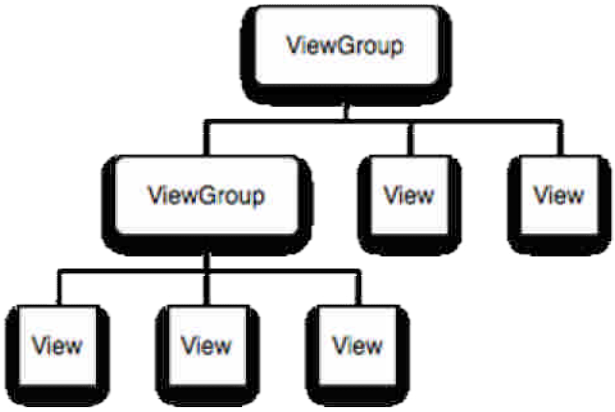
The activity will also be restarted if a so called "configuration change" happens. A configuration change for examples happens if the user changes the orientation of the device (vertical or horizontal). The activity is in this case restarted to enable the Android platform to load different resources for these configuration, e.g. layouts for vertical or horizontal mode. In the emulator you can simulate the change of the orientation via CNTR+F11.

4.2.7. Context

The class android.content.Context provides the connections to the Android system. It is the interface to global information about the application environment. Context also provides the method which allows receiving Android services, e.g. the Location Service . As Activities and Services extend the class "Context" you can directly access the context via "this".

4.2.8. View Hierarchy

On the Android platform, you define an Activity's UI using a hierarchy of View and ViewGroup nodes, as shown in the diagram below. This hierarchy tree can be as simple or complex as you need it to be, and you can build it up using Android's set of predefined widgets and layouts, or with custom Views that you create yourself.



4.2.9. Layout

The most common way to define your layout and express the view hierarchy is with an XML layout file. XML offers a human-readable structure for the layout, much like HTML. Each element in XML is either a View or ViewGroup object (or descendant thereof). View objects are leaves in the tree, ViewGroup objects are branches in the tree (see the View Hierarchy figure above).The name of an XML element is respective to the Java class that it represents..

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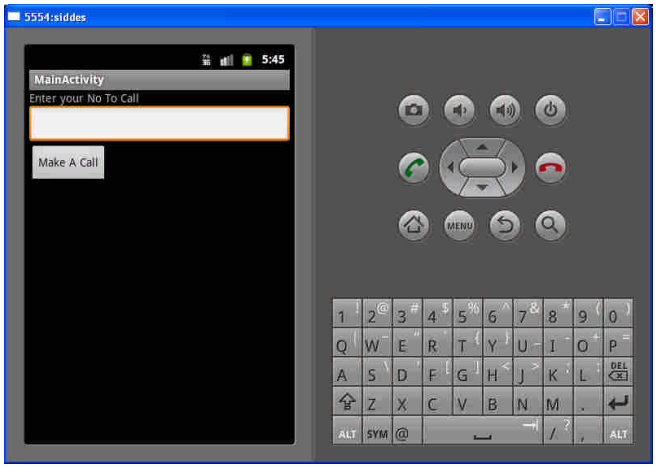
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
                android:layout_width="fill_parent"
                android:layout_height="fill_parent"
                android:orientation="vertical" >
    <TextView android:id="@+id/text"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Hello, I am a TextView" />
    <Button android:id="@+id/button"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Hello, I am a Button" />
</LinearLayout>
```

Notice that the LinearLayout element contains both the TextView and the Button. You can nest another LinearLayout (or other type of view group) inside here, to lengthen the view hierarchy and create a more complex layout.

There are a variety of ways in which you can layout your views. Using more and different kinds of view groups, you can structure child views and view groups in an infinite number of ways. Some pre-defined view groups offered by Android (called layouts) include Linear Layout, Relative Layout, Table Layout, Grid Layout and others. Each offers a unique set of layout parameters that are used to define the positions of child views and layout structure.

5. RESULTS:



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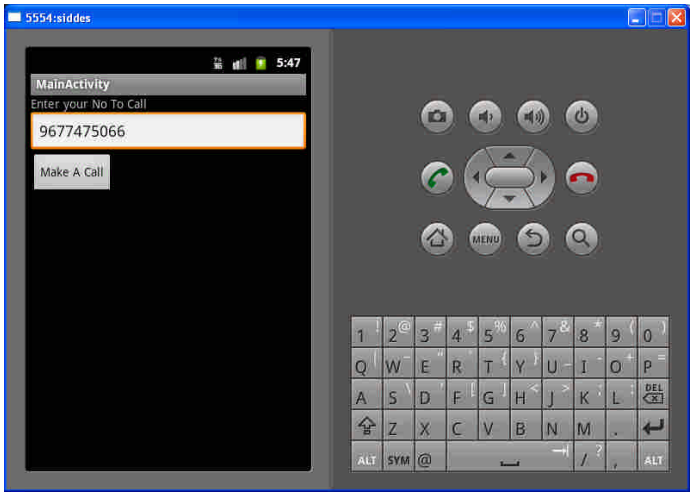

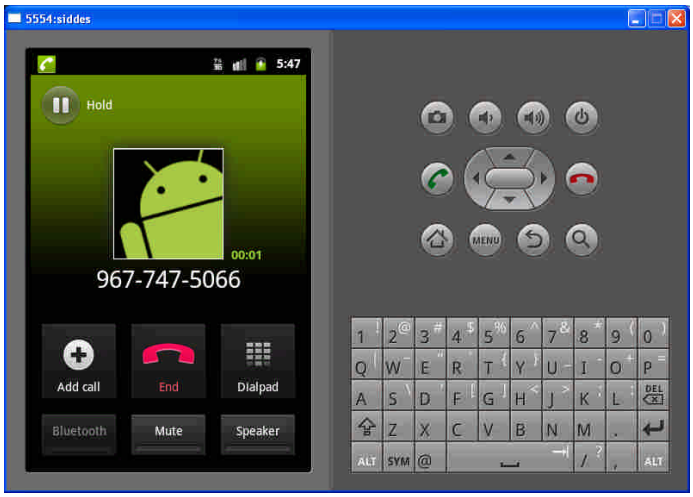

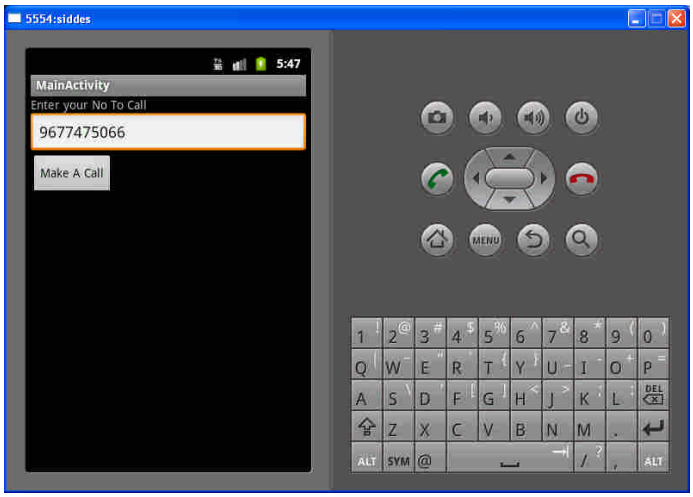

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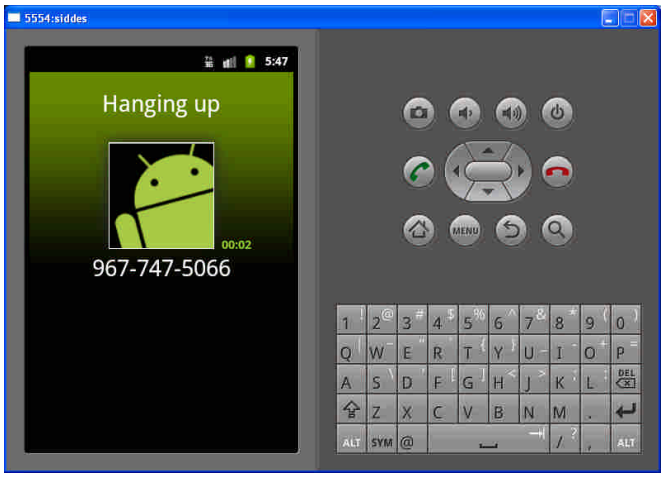

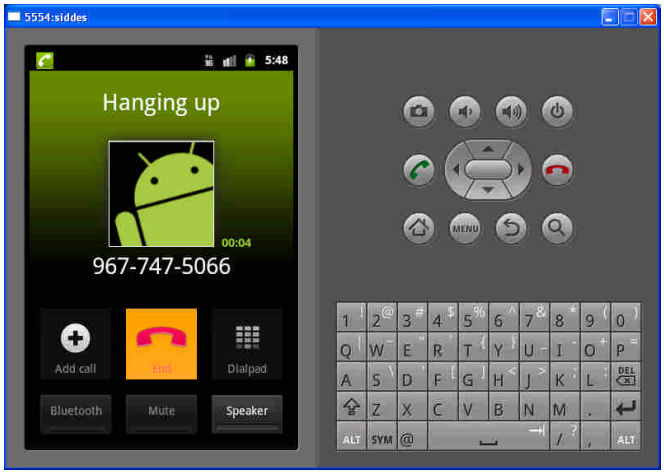

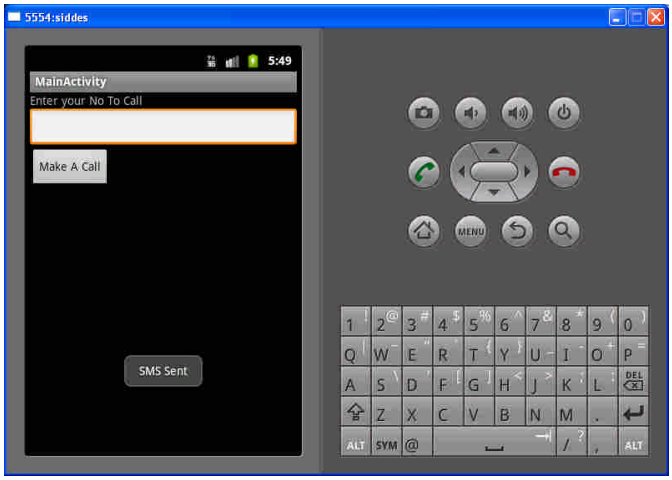

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6. CONCLUSION:

This paper proposed an indoor localization system which has the following originality and contributions: First, the costly offline process of RSS map construction in conventional fingerprint-based localization is removed by the use of inertial sensors. To collect RSS fingerprints automatically, the proposed system conducts inertial sensor-based self-localization and estimates the credibility of the localization. Second, we successfully constructed the collective fingerprint map by a credibility-based user collaboration scheme. The proposed system is based on a passive user participation model, which collects and uploads.

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"BLINSPOT DETECTION AND MITIGATION OF THE MARKET RISK"

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ABSTRACT:

The biggest dangers to any company are the ones that cannot be predicted. To understand these threats, one needs to have strong abilities in anticipating risks and it requires high-end peripheral vision. Past may not be the most reliable predictor of the future. But it can surely point out the blind spots in the respective company or the industry. Failing to learn the lessons will lead to poor detection of opportunities and threat detection which bluntly gives little-to-no strategic value to the company's efforts to achieve competitive advantage. This overlooking of close threats and near-by opportunities is called blind spot. The result of any blind spot is an inability to contribute insights that help senior management to steer the company to attain and sustain competitive advantage. This paper hence, identifies and explores the blind spot effects in the present economy. The marketers never pay much heed to the past tends. They always seek the strategies to get the present work done. They rarely look back. They are busy keeping up with the current trends. They are more interested in what happened rather than why it happened. The study thus focuses on the loopholes while making the strategies especially with respect to the blind spots in competitive intelligence.

The objective of the study is to generate awareness amongst the professional bodies regarding the significance of blind spot detection and the importance of going deep into analyzing the traits of the

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competitive blind spots that might help in safeguarding the company's risk. The paper also throws light on the significance of scenario planning with respect to the competitive blind spots and instituting measures to mitigate the risks associated with the competitive blind spots.

OBJECTIVES OF THE STUDY:

1) To explore the risks with regards to the blind spots
2) To uncover the greatest blunders occurred down the line of corporate history.
3) Bringing out a solution to detect the blind spot
4) Associating marketing strategy with blind spot detection.

RESEARCH METHODOLOGY:

The study is based on secondary data which are qualitative in nature. The source of the data used has their roots in several books and articles. The study also considered the latest research papers put up in several websites. The list of the sources is given in the end of this paper.

DATA ANALYSIS AND INTERPRETATION:

The study mainly focuses on the secondary data and the interpretation is categorized as the following five factors, viz., A, B, C, D, and E.

A) **DEFINING BLINDSPOTS**:

"The biggest blunder we commit in a corporate scenario is not identifying the risks that are approaching our way and anticipating it as opportunities".

Precisely Blind-Spots refer to the unidentified risks that lie in the industry, which is bound to happen and hamper the process of the organization. Competitive blind spots refer to the firm`s poor analysis of its competitor or underestimation of the competitor moves and strategies or misjudging the motion of the competitor and consequently paying a huge price for weakening itself in seeking new opportunities and

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horizons.

"It's been always said, Leaders seek Opportunities at the face of the threat".

As a result of Global intensification the markets have become more competitive than it was ever. The survival had become tougher, so in order to stay alive in the market, one has to hold the competitive advantage over the other. And to hold an advantage over the other competitors, each and every move, strategy, innovations and technology of the other competitors should be carefully monitored. In short – The Survival Of the Fittest has become the notion of today`s businesses.

In spite of this prevailing importance, cases shows that not all corporate do have a competitive analysis on their competitors profile, and have serious blind spots about competitors intentions, capabilities and possible reactions. The main aspects and elements while doing a competitive analysis in examining the blind spots could be referred from the Industry, Competitors and Customers.

Industry

The changes that`s taking place in the industry and new trends that keep on rocketing the market has to be analyzed. Further the emerging technologies which are brought in by the close competitors and coping up with the new technologies that makes radical changes in the industry has to be keenly followed in order to outlast the competitors. If not, this leads to blind spots in competitive analysis.

Customers

In a rapidly changing day to day environment the needs, wants and the preferences of the customers are also changing each day. Not simply, it was said that the customers are the kings of the market. So the firm has to keep itself updated to the new emerging needs and wants of the customers. Identifying the potential customers and catering to their buying patterns and behaviors had been become more important, in avoiding the blind spots.

Competitors

Significant blind spots occur in this particular juncture, as the firm has to very careful in analyzing its competitors, not sticking to only the well-known companies and brands is vital, as there might be potential threat from a new entrant and in this global era, companies shouldn`t limit themselves to a

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regional competitor, as there might be national, foreign invasions sooner or later.

How important it is to take a strategic move during economic slowdowns, is as important in analyzing the competitor during that particular depression period. Competitors may try to seek new target segment or roll down new line extension or diversify their markets and operations.

Firms that do not consider these issues in competitive analysis will fall a prey to competitive blind spots.

B) BLINDSPOT DETECTION AND ITS BARRIERS TO ADDING STRATEGIC VALUES:

The year 1948 witnessed a technological renaissance. Polaroid was founded by Edwin Land who introduced the world to the instant camera. Hence the instant photography became the core business for Polaroid. In 1976 Kodak tried to break into the market of photography. However it failed. The only substitute for the instant photography was the conventional photography that required a long time to get processed. Thus Polaroid had a competitive edge in the market. But the business environment sent a signal of discomfort when the technology of the traditional photography got advanced to a point where the processing time reduced to just an hour. It was a reasonable trade off for the customers. The year 1980 finally became the era of cheap disposable cameras that was the best alternative for the traditional and expensive cameras and the final blow was from the digital cameras. Polaroid suffered from a serious jerk in 1985. It invested millions into the instant motion picture system project, Polavision and Polaroid lost out to video camera which was clearly an alternative to Polaroid's technology. An executive at Polaroid told the press" everybody but Land knew video was on the way". This is quite typical of strong, charismatic, and autocratic technologists who became leaders in the industry. Land stepped down from his authoritative position in the company. But the syndrome of overlooking the growing change in the market persisted over 15 years till the company filled its petition for bankruptcy. The Post-Land –Leadership just did not want to see the changes clearly. Had the early warning of changing technology was caught on the Polaroid radar then the company would have had some different destiny to cherish.

The industry map reveals that the industry landscape is changing at a rapid pace. Every day brings in a

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brave new world in the technical and business arena. Concerned entities in the respective world, if they do not bother to follow up the constant change are bound to bring up the rear. Market is now very much dynamic and exponential. A constant follow up with regards to the constant change in the environmental landscape is very crucial for the sustainability of any concerned entity working within the market. The solution to the matter dealt with has to be addressed with sheer importance. The industry map reveals that the industry landscape is changing at a rapid pace. Every day brings in a brave new world in the technical and business arena. Concerned entities in the respective world, if they do not bother to follow up the constant change are bound to bring up the rear. Market is now very much dynamic and exponential. A constant follow up with regards to the constant change in the environmental landscape is very crucial for the sustainability of any concerned entity working within the market. The solution to the matter dealt with has to be addressed with sheer importance. What Polaroid suffered for the 15 years since 1985 that led to the bankruptcy, was the blind spot. Had this blind spot was been figured out by Land or any of his successors, then Polaroid would have survived the market warfare.

Having done the scanning of the environment of the market, risks need to be mapped and rated as per the interest of the organization. To define with clarity, anything that causes a hindrance to the vision, mission and objective an organization or a firm is called a risk. Hence the future threat perceived, should be rated on a desired scale as per the concerned convenience.

C) RISK DETECTION

Globalization has erased the concept of territory in the world of trade and commerce. Earlier days witnessed the dictators as the influential individual with the supreme military power. Recent years witness the economic superpower as the dictator of the world. In that way, things have changed from head to toe. But the aggression has the same intensity and the lust for the power is still the same. Hence the bottom line of every organization is money and thus the power play has begun the day people understood the significance of economic superpower. The global market is interconnected by regulations and trade.

The risk detection in the excessive complex market stands a chance to get extremely vulnerable. The

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business environment needs a constant monitoring as the landscape changes very rapidly. The rapid changes in the landscape are just the outcome of the exponential trend of the market dynamics. But the bottom line of risk detection is the constant environment scanning. No matter how much critical or how much innovative risk detection model is used, has not the environmental scanning been done on a regular basis, the detection cannot be made. Detection and analyzing tools will come and will evolve into finer tools and then will also get obsolete with the emergence of new tool and technique. But if the scanning is not done properly, actionable intelligence will not get generated and hence risk will not get detected. Hence, no matter how complex a structure the global economy has, which no wonder will evolve more into a more complicated structure, but the scanning of environment to get a proper idea is of utmost importance. To gauge the risk and its significance, an organization needs the daily updates of every form regarding the micro and macro environment of the economy. Micro includes everything with regards to the organization and macro includes everything with regards to its competitors, market, global changes, Technical evolution-in short, everything to landscape the industry the organization is playing or wants to play.

However, in order to mitigate the risk, one will have to understand the kinds of risks that he may have to be come in terms with in the market while undergoing any tradeoffs. They are thus as follows:

- Strategic risk
- Financial risk
- Operational risk
- Environmental risk
- Commercial risk

Strategic risks includes the threats arising out of mergers and acquisitions, changes in demand among the customers, changes in the industry and the changes regarding the technology. The compliance risk involves the legal issues that need to be addressed. Financial risks includes the issues regarding the daily examination of proper cash flow in and out of the organization that concerns the credit and debit flow of money, insurance coverage of large and doubtful debts and the bank interests. Moreover the financial

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risks cover the exchange rate risks and the export risks. The exchange risks management finds solutions to the risk in hedging. Hedging can be done in two ways:

- Forward foreign exchange contracts that is mainly handled by the respective bank of the organization.
- Buying currency options

The operation risks includes the risks regarding the proper talent management, proper supply chain management, transportation management, accounting controls, information technology management, regulations and the board composition of the organization themselves.

D) **STRATEGIC INFLECTION POINT**:

Strategic Inflection Point – a new term coined by Andy Groove, which states it as a time in the life of business or project when its fundamentals are changing significantly. Often `point` is a misnomer, and it's actually a long, sometimes painful period of change.

Strategic Inflection Point could also be the subtle- in a way hard to detect changes that are happening in the industry and in the environment. The wheels roll in the form of emerging new technologies, entry of new competitor (unrelated diversification), changing patterns of consumer behavior and buying patterns.

"IT'S NOT A SIN TO BE DEFEATED, BUT TO BE SURPRISED"!

Surprise! When everything looks and feels normal to you, suddenly some changes takes place which involves you seriously.

Strategic Inflection Point may bring about full scale changes in the way the business is being conducted.

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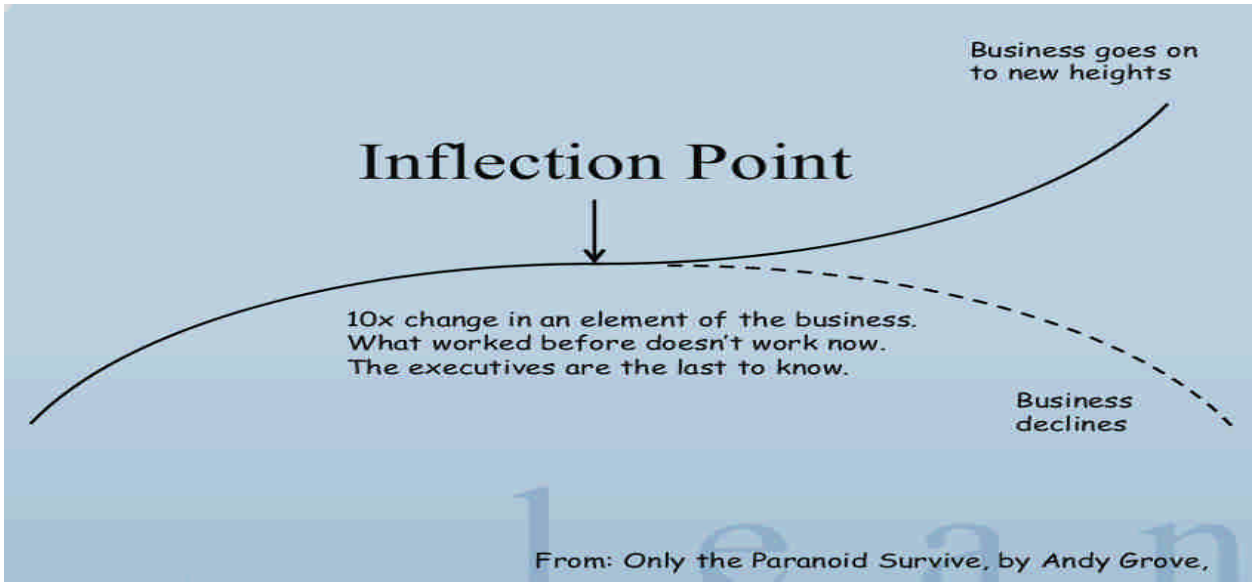

And if necessary reactions are not made to these changes in the environment, then firms would end up paying dearly for that. Thus strategic inflection point could be deadly.

In short strategic inflection point could be fundamental changes in the business. It has become common and imperative in today`s world that firms should adopt to the each and every changes that occur in the environment, be it micro or macro. Else it's obvious that firms would be easily sunk in a sea, which is boiling with cut throat competition.

E) **SCENARIO PLANNING AS A TOOL FOR MITIGTAION**:

Practically, the market landscape is supported by the globalization in itself. The words that govern all the activities inside the market are given by "deterritorialisation" and "supraterritorialisation" where each market is interlinked and interconnected with each other. But each market has its own rule while in the game inside the ring. Globalization being the catalyst of the unification of the diversified economies has brought into intricacies in the scenario of the world market.

The intricacies are very crucial to play with as it is very much likely to invite the vulnerabilities from the competitors while playing in the market. The market being dynamic and restricted with unlimited flow of products and services undergoes a very high-end competition. Players in the market are very aggressive. Hence it is very critical of every entity in the market to do proper planning to identify and assess the risks,

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then control them and finally mitigate them. While undertaking the process of risk identification, business environment should be given the maximum emphasis. This leads to the assessment of the likelihood of the occurrence of any event in near future that holds the key to the scenario planning. Scenario planning is nothing but assessing the current picture of the environment, analyzing the future risks that the business of any particular nature is vulnerable to and then identifying the possible actions that can be taken in response to the threats. The planning should have a follow up with the systems in place to deal with the predicted perils. Eventually the constant monitoring should be done to keep a check on the effectiveness of the strategy planned to mitigate the threats. Scenario planning contemplates a wide variety of possibilities, where the industry may head in the future. This planning helps in determining the opportunities and the risks that lie ahead in a more comprehensive and innovative manner.

As a Chinese curse says, “May you live in interesting times”, scenario planning has a vital role to play. The role of scenario planning is hence given by:

- Shaping the long term strategy of the organizations.
- Drawing strategic decisions at times of uncertainty.
- Continuous adaptation to the changing dynamic market.
- Creating sustainability in the organization through innovation and creativity.

Hence the bottom line is, scenario planning leads to figuring out of worst case scenarios. This leads to risk detection. Hence if risk can be detected in advance, precautions can be taken to mitigate it. Hence, scenario planning helps in risk assessment and can be treated as a tool for risk mitigation.

CONCLUSION

Though past is considered as dead and effete, it can certainly be a better predictor for the future. We can always learn from the past citing, the blind-spots in the company or in the industry. Those who fail to learn from these examples will face threat at every corridor of their operations and will not be able to foresee the ample opportunities that lie ahead of them.

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Blind spots occur when firms do not react to the changing business environment, the emerging technologies, buyer`s buying patterns and shifts in buyer`s attitude and most abruptly not analyzing the potential threats from the competitors.

Analyzing the competitors and their strategic moves is not only important to stay ahead of the competition but also to make strategic decision making. When companies fail to reflect to these threats and changes that is where it leads the firm to potential competitive blind spots.

When properly analyzed and focused, these blind spots could always be used to seize or gain a competitive advantage over the other firms and it helps in deciding the strategic moves to be competitive! In such situations, scenario planning helps to foresee the future incidents that are likely to occur. Hence it helps us in determining the worst case scenarios and hence inculcates a situational awareness and brings in organizational leadership and helps in achieving benchmarking.

As Charles Darwin said,

"It's not the strongest of the species who survive, or the most intelligent, but the ones most responsive to change".

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Technology as a Source of Stress Among Employees: Input to Human Resource Management (A Review)

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ABSTRACT

Technology has brought so many advantages to the dynamic end-users from personal to professional development as well as establishing career pathways. But machines are also like human beings in terms of communication. The expected information that the users want to achieve from the computer equipment sometimes become the cause of frustration on the part of the users when it is unable to produce certain output coming from its source. This article reviews some of the technological stress brought to the employees during their work hours. The companies' human resource department must be aware and informed regarding the problems being encountered by their employees that might be the cause of stress leading to dissatisfaction and inefficiency of the workforce. Designing a program that would address these needs would lessen the unpleasant behaviour of the staff towards the interrupted response of modern technology.

Keywords: Technological Stress, Human resource, computer stress,

Introduction

Work can be routinary in the office wherein computer related skill is an important aspect of competency of the employees to perform their duties with the use of technology. People at home and at work are being too dependent to the power of computer. Various peripherals connected to this technology such as printer, scanner, fax, photocopier, etc. are already part in any business set-up for accomplishing daily transaction and activities. Responding to the demands and inquiries of the clients immediately is a form of providing quality service with an end result of achieving the goal of making the customers really satisfied at the end of the process. But the interaction of employees between customers and technology is a factor that drives the pressure and tension to produce stress.

Every end-user who enjoys the benefits of computer should know that there is also a dark side to this modern wonder of technology (Orman, 2010). There is also a downside in the form of computer-related stress like the finding of the study conducted in 2003 by UK poll for the Symantec Corporation showed

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86% of people surveyed as having experienced stressful IT-related incidents (Charlton, 2010). Understanding the role of the environment that surrounds with different computer equipment and its diverse applications would actually explain the causes of technological stress and seek some support from the company's human resource management on how to identify those factors to relieve stress if cannot be avoided in any field of work.

Computer Stress and Age Differences

For some employees who were used to manual operations are too resistant in adapting the modern system of processing information. It is commonly believed that older adults hold more negative attitudes toward computer technology than younger people and the finding of the study conducted by Czaja and Sharit (1998) reveals that older people perceived less comfort, efficacy, and control over computers than did the other participants. Although the use of computers is expanding in the overall population, for older adults there still remains a "digital divide", therefore, development of strategies to help insure that older people have equal opportunities to access computer technology depends on understanding why they have lower adoption rates (Nair et al, 2005). In many cases, older adults are the fastest growing computer and Internet user group in both personal and workplace contexts. However, the needs and concerns of older adults as computer users differ from those of younger users as a result of the natural changes associated with the aging process (Wagner et al, 2010).

It might be expected, people with less experience with computers and those lacking confidence in their ability to deal with computers tend to have greater feelings of helplessness and frustration and experience greater anger at both themselves and computers when things go wrong (Charlton, 2010). Stress comes in to older people when they get stuck in a computer operation without knowing what to do next. Maintaining proper collaboration between young and adult professionals in the office is a good way in acknowledging the age differences to address the issue of digital divide. Competition should not be the way of life in the department to beat the performance of one staff against the other when it comes to demonstration of computer expertise.

Hardware and Software Problems

Improper placement of keyboard and height of the monitor and lack of considerations for the selection of adjustable chairs and tables to be used by office employees are some of the sources of stress being neglected by the users and the management. Choosing the right office equipment most appropriate to the new office staff would benefit the whole organization. Ensure that the chair height is adjustable with lower back support and elbow rest so that any staff who occupies the position could fit in the work area. The position of the computer keyboard must not too high nor too low from the level of the arm and elbow of the user so that proper back posture can be maintained. The height of the monitor screen must level to the eyesight with viewing distance ranging from 20 to 40 inches. The management must ensure these

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considerations so that employees may not suffer severely from any health problems because of inappropriate acquisition of office hardware equipment.

Outdated computers are the biggest reason for computer frustration (Lane, 2012). Slow processing of the system would really add to the burden of the office staff in a work place especially those employees assigned in the customer service where people need quick attention and response. Computer knowledge is another source of stress where the user cannot accomplish a certain task immediately due to lack of training in using the software application.

Printers sometimes might not function properly due to paper jam, program error or low ink level. Sometimes what can be seen on the screen is not what really the output on the hard copy due to printer setting which accidently selected without being noticed at once. It would sometimes affect the mood on the part of user because the hard copy of the report is badly needed by the immediate superior. Blaming the performance of the computer is the end-result of the untoward consequence that really affects certain behaviour due to sudden reaction. Patience sometimes is the only answer to wait for the printer to give response from the command. Trying to click many buttons and options on the screen makes the situation worst until the entire computer program becomes busy and not responding anymore.

LCD projector without output signal during the actual presentation due to some unknown reasons is one source of stress for the technical committees and event organizers. They are time-pressured because everybody is waiting for the presentation to start but still the speaker cannot proceed with the talk without the Power Point Presentation. Sometimes it consumes and wastes the time of the conference or meeting attendees due to technical problems. Setting up earlier the LCD projector in the venue to test its functionality would be enough preventive action to avoid meeting delays.

Corrupted Power Point presentation due to virus would also be the source of stress for the lecturer. Computers infected with computer virus would also become a source of great stress for the employees due to anxiety of what the virus can possibly do with the documents like deletion of all files in a certain folder. Maintain an updated antivirus scanner so that any new created malware could be detected by the antivirus software. Refrain from downloading files from unreliable sites to avoid viruses from the internet.

Documents not properly saved in the flash drives or prepared videos do not play due to incompatibility of media player are some of the problems might also encountered in live presentation. Testing it earlier in the venue is also a good habit to practice to oversee immediately the probable cause of problem. It is always necessary to have a back up file sent in the email aside from saving it to the flash drive. Even important office or personal files must always have a back up in a separate external hard drive or in the email so that documents can still be accessed anywhere.

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Receiving and sending electronic mails could also be a source of stressful work load. There is also evidence that Email, unlike more traditional communication media, can exert a powerful hold over its users and that many computer users experience stress as a direct result of email-related pressure (Hair et al, 2007). In a previous study by researchers at the universities of Paisley and Glasgow email users were categorised into three different types: those adopting a relaxed orientation to email who don't feel under any pressure to respond quickly to emails and don't expect people to respond quickly to their emails either; those having a driven orientation who respond to emails quickly and expect fast responses to their emails, but see all this in a positive light; and those having a stressed orientation who see email as a source of stress and difficulty in their life (Charlton, 2010).

Maintaining proper network security and passwords must always be observed so that any confidential files and information of the company would not be disclosed the copy to anyone unauthorized to have it because it would lead to the one of the most stressful incidents in the department.

Conclusion

Computer Stress Syndrome occurs when a user "suffers a continuous state of technical anxiety that can lead to "road rage" style behaviour (Lane, 2012). People have experienced eye strain, neck and back fatigue, headaches, repetitive stress injuries or lack of focus while at the computer (Lane, 2012). The neck and shoulder pain symptoms are very common among intensive computer users (Ming et al, 2004). The symptoms and signs caused by repetitive computer use that is characterized by neck, shoulder, elbow, wrist and hand pain, paresthesia, and numbness can be called 'Computer Related Upper Limb Musculoskeletal (ComRULM) disorders' (Ming & Zaproudina, 2003) .Work stress contributes significantly to corporate health costs. Numerous corporations have implemented worksite stress-management interventions to mitigate the financial and personal impact of stress on their employees (Eisen et al, 2008). Preventive measures and treatments for computer related stress injuries help in preventing loss of movement in the joint in future (indiaparenting.com). Proper habitual seating exercise while trying to accomplish certain task for few seconds would prevent health problems to occur that caused by excessive time in front of the computer. Also to relive stress, place a small plant beside the computer. NASA researchers have proven that having a plant at workstation reduces stress level (Lane, 2012).

Computer anger is likely to be a source of stress for a small but significant number of people, that computers' non-sentience leads to physical disinhibition, but that evidence that the expression of computer anger in social environments is inhibited by fear of people's negative evaluations is weak (Charlton, 2009). Hierarchical moderated regression results support that the attitude towards computer acts as a moderator in the relationship between computer anxiety and stress; computer anxiety and job satisfaction; and computer anxiety and career satisfaction (Parayitam et al, 2010).

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In order for the employees to obtain high performance evaluation, the aspect of job satisfaction must be first achieved with lesser induce stress from the work environment. The management must provide updated office equipment or new computer application software so that the employees would enjoy their work without any hassles or delays on providing better services to clients. Training the employees on how to use the newly acquired software is always necessary.

The bottom line of all these stressful moments with technology is how the end-users react to the situation. Behaviour is still an important factor in reducing stress. Anxiety towards the current condition always yields greater position in the consciousness that makes anyone cramming and sometimes confused who could not think clearly and accurately at the moment. Stress free environment would increase work productivity with balance attitude towards personal and professional growth.

Administration of learning needs analysis survey to the employees focusing on the use of computer and other related technologies available in the company would define the areas that require retraining to increase the level of knowledge, skills and awareness of the employees on how to use certain equipment stress free and easily with confidence and efficiency.

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Relationship among Money Supply, Economic Growth and Inflation: Empirical Evidence from Three Southeast Asian Countries

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Abstract

This paper aims to investigate the relationship among money supply, economic growth and inflation in three Southeast Asian countries (Malaysia, Indonesia and Singapore) by using data from 1980 to 2010. Johansen co-integration is employed to analyze the data. The findings show one co-integrating equation, thus implying that a long-run relationship exists among inflation, money supply, and economic growth in all three countries. The Granger causality model is also employed, and results show that in Malaysia money supply does not Granger cause economic growth. Economic growth does Granger cause inflation in Malaysia, Indonesia and Singapore. Causality runs from economic growth to money supply only in Malaysia. A unidirectional relationship exists from money supply to inflation in Malaysia and Singapore. The government should consider controlling money supply to influence economic growth because an increase in money supply can cause inflation instead of economic growth in Malaysia and Singapore.

Keywords: money supply, economic growth, inflation, Johansen co-integration, Granger causality

1. Introduction

Price stability and economic growth are macroeconomic goals that a country must achieve. Monetary policy is one of the tools used by a government when a country suffers from recession. The government influences money supply to revive the economy. However, this issue is still a subject of debate among economists and policy makers. An increase in money supply contributes to strengthening economic growth while simultaneously creating another problem, that is, inflation. Ziotis and Papadas (2011) stated that monetary policy causes inflation. Hence, this subject always comes to the fore. A considerable and

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thorough policy on money supply should be formulated to ensure the balance between economic growth and inflation. Money growth is said to have a positive effect on economic growth. Ogunnuyiwa and Ekone (2010), Magazinno (2011), as well as Khan, Qayyum, and Sheikh (2005) only explained the relationship between money supply and economic growth without considering inflation.

Most economists believe that money growth is inextricably connected with inflation. Fisher & Seater (1993) believed that there is negative relationship between inflation and economic growth in pooled section, time series regression for many countries. It means that economic growth is high when inflation is low and vice versa. This finding is supported by Barro (1995) and Bruno and Easterly (1998) who found the same relationship between inflation and economic growth. However, it is different from Omanukwue (2010), Dwyer (2001), and Simkawa et al. (2012), a positive relationship exists between money growth and inflation. Inflation might transpire as more money becomes available in a market. Inflation is a heavy cross for the poor to bear. Ziotis and Papadas (2011) found that money supply is associated with retail food prices. An increase in food prices caused by money growth can threaten the poor. Food is a product that all people must buy. Inflation forces people with low income to struggle just to afford the high prices of food. Their plight should be addressed when formulating a policy.

Very few empirical studies have been conducted on the effects of money supply on economic growth and inflation. Simply looking at one effect of money supply on economic growth is not enough to formulate a policy on it. Policy makers should also consider the effects of money supply on inflation. Okpara and Nwaoha (2010), as well as Hossain (2005), explained that a relationship exists among money growth, economic growth, and inflation. Thus, the effects of supplying more money remain complex to policy makers. A country that attempts to control money supply risks suffering from inflation. Therefore, this study investigates the relationship among money supply, economic growth, and inflation in three Southeast Asian countries (Singapore, Malaysia and Indonesia).

2. The trends of inflation rate, economic growth and money growth in Malaysia, Indonesia and Singapore.

Figure 1 indicates the trends of inflation rate, economic growth, and money growth in Malaysia from 2000 to 2010. Based on the figure, the three indicators experience a fluctuation and appear to be mutually related.

Figure 1: Inflation rate, economic growth Rate and money growth in Malaysia from 2000 to 2010

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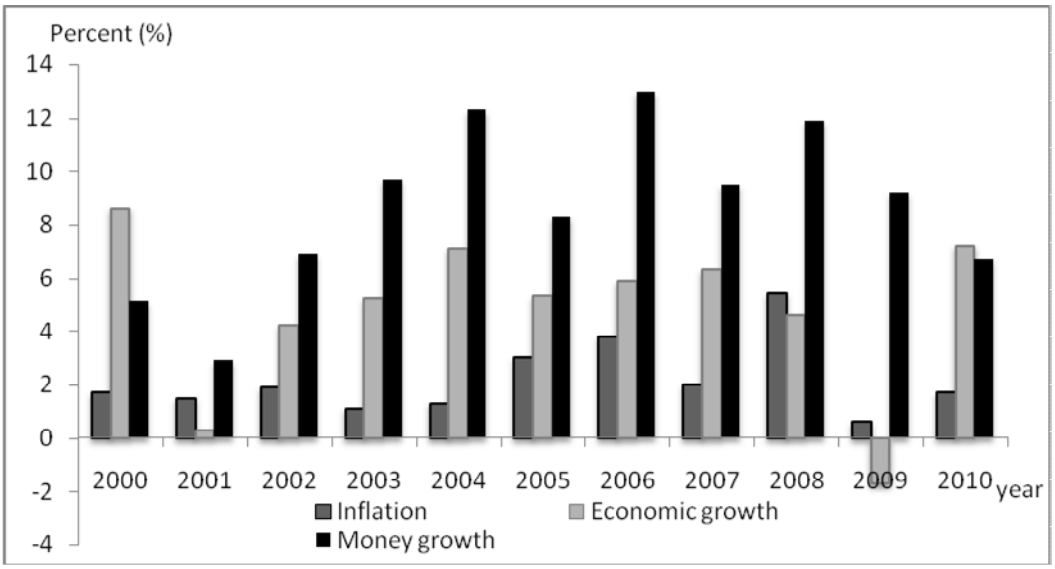

Sources: World Bank, 2011; CIA World Factbook ,2011; Central of Bank Malaysia Report, 2012

The inflation rate was at 1.7% in 2000 and it dropped to 1.5% in 2001. The following year, inflation increased and reached 1.9%, and then it dropped to 1.11% in 2003. Afterwards, the inflation rate steadily increased for three years and reached 3.8%. It went down again to 2% in 2007. The highest inflation rate (5.4%) was recorded in 2008, and then it fell substantially to 0.6% the following year. In 2010, inflation rate escalated once more and reached 1.7%.

Economic growth in Malaysia was very strong in 2000 with a growth rate that reached 8.6%. Then, it dropped to 0.3% in the next year. Government policy revitalized the Malaysian economy and economic growth was recorded to be 7.1% in 2004. However, the growth rate dropped slightly to 5.2% in 2005, and then it increased to 6.3% in 2007. Malaysian economy was hit by recession in 2009 and its economic growth was significantly impaired in 2009 at -1.7%. Malaysia was not the only country afflicted by the financial crisis; other countries also suffer the same problem. The government took swift action to overcome the problem and revived the economy. The growth recorded was 7.2%, putting all citizens at ease. Analyzing the relationship between inflation and economic growth in Malaysia, a negative relationship was found between the two indicators in the short run; however, a positive relationship was observed in the long run, implying that an increase in economic growth can cause inflation to transpire (Datta & Mukhopadhyay, 2011).

Money growth in 2000 was recorded at 5.1%. The growth depreciated to 2.9% in 2001 and increased to 8.3% in the next year. In 2006, money growth reached its highest (13%) within a period of 10 years. It dropped again in the following year and rose in 2008, reaching 11.9%. In 2010, money growth was recorded at 6.7%, which was higher than the previous year. Money growth, economic growth, and inflation were seen to be positively related in the long run. The relationship among these variables is of utmost importance to policy makers to ensure that a macroeconomic stability policy can be deployed

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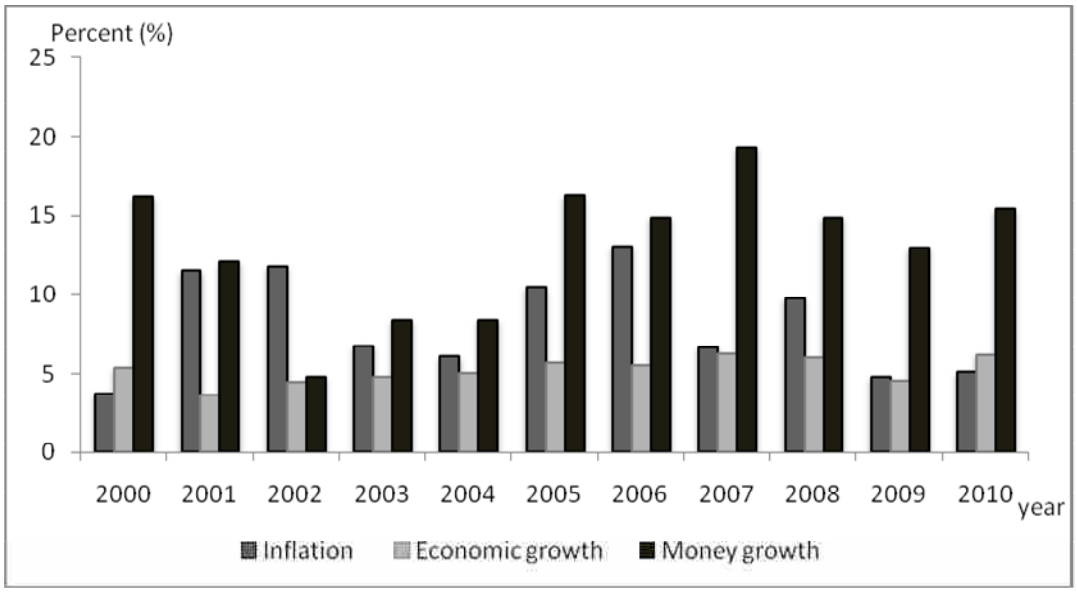
(Ahmed & Suliman, 2011).

Figure 2: The Inflation Rate, Economic Growth Rate and Money Growth in Indonesia from 2000 to 2010



Sources: World Bank, 2011; CIA World Factbook ,2011; Malaysian Economic Planning Unit, 2012

Figure 2 show that the trends of inflation rate, economic growth and money growth in Indonesia from 2000 to 2010. Indonesia is observed to have fluctuation during the period. In 2000, inflation rate was 4% and increased to 12% in 2001 and the rate remained constant the following year. In 2003, the inflation rate steadily dropped for two years and reached 6%. The rate rose to 13% in 2006 and then shrunk to 7% in 2007. Afterwards, it escalated to 10% in the next year. The inflation rate fell and reached 5% in 2009 and 2010.

In Indonesia, the trends of economic growth in Indonesia do not indicate a fluctuation. In 2000, economic growth was 5% and then slightly dropped and reached 4% the following year and the rate remains unchanged in 2004. The growth was enhanced to 6% in 2005 and remained constant until 2008. Afterwards, the economic growth a little fell to 5% and went up to 6% in 2010. Based on the trend of inflation rate and economic growth, these two things do not influence each other.

Money growth was recorded to be 16% in 2000. The growth then dropped to 12% the following year and decreased again to 5% in 2002. Afterwards, the money growth increased to 8% in 2003 and it remained constant in the next year. The money growth increased to 16% in 2005 and slightly went down to 15% the following year. In 2007, money growth escalated to 19% and then dropped again to 15% in the next year. Money growth was recorded to be 13% in 2009 and it increased to 15% the same rate as 2008. Based on the trends, the relationship between money growth and inflation rate is seen to have connection in Indonesia

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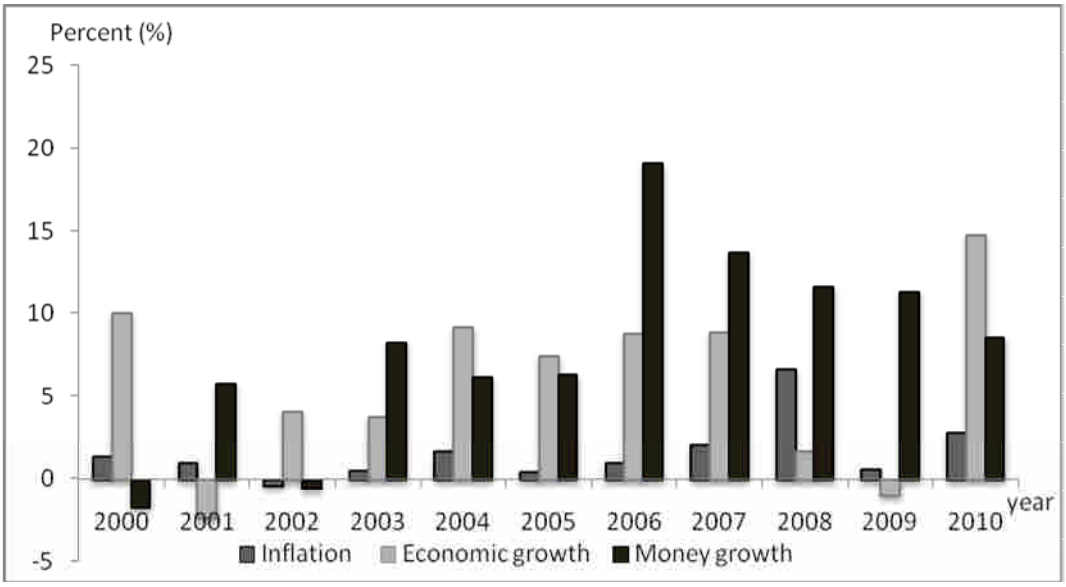
Figure 3: The Inflation Rate, Economic Growth Rate and Money Growth in Singapore from 2000 to 2010



Sources: World Bank, 2011; CIA World Factbook ,2011; Malaysian Economic Planning Unit, 2012

Figure 3 shows the trends of inflation rate, economic growth and money growth in Singapore from 2000 to 2010. In 2000 and 2001, inflation rate was recorded to be 1%. In 2002 and 2003, the inflation rate was very low (0%) and it increased to 2% in 2004. It reverted to be 0% the following year. Afterwards, it gradually increased to 2% in 2007. The inflation rate intensified and hit 7% in the next year and then shrunk to 1% in 2009. In 2010, the inflation rate 3% was recorded.

In 2000, economic growth was 10%. Singapore slip into recession in 2001 and its economic growth was deficit at -2%. However the economy recovered from the recession the following year and its growth was 4% and in 2003, the same growth was also recorded. Economic growth then increased substantially in 2004 and it reached 9%. The growth fell slightly in the next year and its growth (7%) was recorded. In 2006, economic growth rose to 9% and the same growth was recorded in 2007. In 2008, economic growth was 2%. Singapore suffered from recession again in 2009 with economic deficit at -1% The Singapore took action to revive the economy and it recovered with high economic growth at 15%. Inflation is seen to have a positive relationship with economic growth.

In 2000, money growth was observed to be negative at -2%. Money growth increased to 6% the following year and went down to be negative again at -1% in 2002. It escalated to 8% in 2003 and fell to 6% in the next year. The growth was recorded to be the same as previous year in 2005. Singapore had the highest

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money growth (19%) in 2006. The growth gradually dropped to 9% in 2010. Money growth is seen to be connected with inflation rate economic growth.

3. Literature reviews

Most early studies examined the relationship among various variables, especially money growth and economic growth, by using Granger causality (Ahmed & Suliman, 2011; Smkawa et al. 2012; Omanukwue, 2010; Magazinno, 2011; Mehrara and Musai, 2012). Various results have been identified to determine the causality relationship among the variables. According to Ahmed and Suliman (2011), who examined three macroeconomic variables (gross domestic product (GDP), money supply, and price level) from 1960 to 2005 in Sudan, the Granger causality test shows that no causality exists between money supply and economic growth. However, money supply has a direct effect on the price level of products.

Simkawa et al. (2012) attempted to examine the factors that caused inflation in Malawi from 1995 to 2011 by using the correlation matrix and the Granger causality test. This study also attempted to deal with the questions, "Does money supply trigger inflation? Do exchange rate movement and world rate of inflation drive the same result?" The results obtained by the study show that a positive relationship exists because inflation is influenced by exchange rate adjustments. Production and monetary supply also prompt inflation with lags of about three to six months.

Omanukwue (2010) employed the Engle-Granger two-stage tests and the Granger causality test to examine modern quantity theory of money in Nigeria. Using quarterly time series data from 1990 to 2008, the results prove that a long-run relationship exists among interest rate, money supply, prices, and financial sector development in this country. A positive relationship is shown between money and prices. A direct and positive link between money and price is discovered from the analysis of the Granger causality test; however, a non proportional relationship exists between the two variables. A unit increase in money supply causes price to increase in a small rate.

In Italy, a study conducted by Magazinno (2011) found that a relationship exists between GDP and the value of items in public spending comprising general public services, defense, public order and safety, economic affairs, environmental protection, social protection, education, culture and religion, recreation, health, and housing and community amenities. The Granger causality approach was applied in the study using data from 1990 to 2010. The same method was employed in Iran by Mehrara and Musai (2012) to investigate the relationship among money, GDP, and prices. Annual data from 1960 to 2008 were collected, and the results proved that money has an effect on the price of goods and services only in a short run.

In addition, Ziotis and Papadas (2011) attempted to examine the relationship between retail food price index and money supply in Greece for over 30 years. They used monthly data from January 1970 to December 2000. The Engle-Granger and vector error correction models were used. Results of the study

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show that money supply has an effect on the price of consumer foods. In the long run, the monetary policy was the main factor responsible for the change in food price. The Engle-Granger model was also applied by Zapodeanu and Cociuba (2010) to examine the relationship between GDP and money in Romania. A small percentage of the relationship is found between money and GDP.

Mishra et al. (2010) performed a study on the relationship among money, price, and output in developing countries, particularly in India. The three variables were tested using vector error correlation model and cointegration test. Bidirectional causality is found between output and money supply in the long run. Money supply also has bidirectional causality with price level in the short run. A unidirectional causality exists from price level to money supply and from price level to output in the long run. The results were obtained from 59 years of data starting from 1950 to 2009.

In Pakistan, Gul et al.(2012) conducted a study by using ordinary least square to determine how monetary authorities can influence macroeconomic variables such as GDP, money supply, interest rate, inflation, and exchange rates. Data from 1995 to 2010 were analyzed, and the findings show that the interest rate has a significant and negative effect on output, whereas money supply can have a positive effect on output. Inflation and exchange rate are negatively related to output. Khan et al. (2005) also conducted a study in Pakistan. However, they reported different directions of the relationship, and employed a different model. They attempted to determine the relationship between financial development and economic growth by using the autoregressive distributed lag approach. They concluded that from 1971 to 2004, real interest had a positive effect on economic growth in the long run. In the short run, investment was positively related to economic growth, implying that a change in investment can enhance economic growth. In addition, a change in real interest rate would have a desirable effect on economic growth.

Monnet and Weber (2001) performed a study on 40 countries, including the United States, to determine the relationship between money supply and interest rate. They used Fisher equation view as a model and ascertained that a substantial increase in money growth could result in lower interest rate because future money growth is unanticipated by people. Another result, however, indicates that the interest rate is higher because the expected future money increases. The results were obtained using data from 1961 to 1998.

Bruno and Easterly (1998) attempted to explain the relationship between inflation and economic growth. Monthly data were collected from various countries. They found that cross section correlation depends on the countries with high inflation but without the high inflation countries, the significance of cross section relationship is not present. Thus, cross section datasets cannot explain the relationship but the data on high inflation can explains that there is relationship between high inflation and economic growth. Fischer (1993) used cross sectional and panel regression and found that growth is negatively related to inflation, large budget deficits and distorted foreign exchange markets by using cross sectional

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and panel regression

Lucas (1980) performed empirical illustration of two implications of the quantity theory of money. Linear filtering techniques were used to extract low frequency components from M1 and inflation for 1955-1975. Sargent and Surico (2010) extended analysis from Lucas (1980) on two illustrations of the quantity theory of money. They believed that there is the difference in the empirical proposition by Lucas to differences in monetary policies across period. They proved that periods in two quantity theory prepositions break down. The estimation of dynamic stochastic general equilibrium (DSGE) models explained the alteration in monetary policies that contribute to the breakdown.

4. Methodology

This study applies empirical analysis and focuses on some variables such as real GDP, money supply (M3) and consumer price index (CPI). Data from 1980 to 2010 were collected from Malaysia, Indonesia and Singapore to determine the relationship among the variables.

Legenda:

(Figures in parenthesis are the critical values.)

Where:

GDP is the real gross domestic product representing economic growth.

M3 is the money supply representing money growth.

CPI is the consumer price index representing inflation rate.

4.1 Stationary Test

The first step in constructing time series data is to determine the non-stationary property of each variable. We must test each of the series in the levels and in the first difference. All variables were tested in levels using the Augmented Dickey-Fuller (ADF) Test. Consider the equation below:

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + \alpha \sum_{i=1}^{p} \Delta Y_{t-1} + u_t \qquad (1)$$

where Y is our variable of interest, Δ is t the time trend and the difference operator, t is the time trend, P is the number of lagged term and u is the white noise residual of zero mean and constant mean and constant variance. $(\alpha_1,\alpha_2,\beta_1,...\beta_m)$ is a set of parameters to be estimated. If the stationary test is significant, the variable series is stationary and have no unit root. Thus, the null hypothesis will be rejected, but the alternative hypothesis will be accepted. However, if the stationary test is not significant, the variable series is non stationary and has a unit root; thus, null hypothesis will be accepted. The hypothesis for this

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study is as follows:

$H_0: \delta = 0$ (unit root/ non stationary) (2)

$H_1: \delta \neq 0$ (no unit root/ stationary (3)

4.2 Co-integration Test

Co-integration test is used in this study to examine the long-run relationship between all variables. Consider the following levels of VAR, with X_t defined as the log of M3, GDP and CPI.

$$X_t = c + \sum_{j=1}^{p} \Gamma_j \Delta X_{t-j} + \varepsilon_j \quad (4)$$

If the variables in X_t are I(1), the VAR in Eq. (4) is not stationary. If no co-integration exists, statistical inference is not possible by using the usual tests. Given this condition, the difference of the series should be determined and a first difference VAR of the form should be estimated

$$\Delta X_t = c + \sum_{j=1}^{p} \Gamma_j \Delta X_{t-j} + \varepsilon_j \quad (5)$$

Integration vectors give rise to the stationary variable. If this is the case, the VAR in Eq. (5) can be written as

$$X_t = c + \sum_{j=1}^{p} \Gamma_j \Delta X_{t-j} + \prod X_{t-1} + \varepsilon_t \quad (6)$$

In Eq. (6), II is a rank *r* matrix that can be divided as

$$\prod = \alpha\beta' \quad (7)$$

where α is a 3 × *r* loading matrix and β is a 3 × *r* matrix of co-integrating vectors, *r* being the number of co-integrating vectors. Following the Johansen procedure (Ighodaro, 2010), the number of co-integrating vectors were tested by using the co-integrated VAR as in Eq. (6).

4.3 Granger Causality Test

The Granger causality test is employed to examine the causal relationship between two variables. If the p values of the variable *Y* significantly contribute to forecast the value of another variable *X*, then *Y* has a Granger causal relationship with *X* and vice versa. The test is based on the equation below.

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$$Y_t = \gamma_0 + \sum_{z=1}^{p} \gamma_z Y_{t-z} + \sum_{i=1}^{q} \lambda_i X_{t-1} + \mu_t \quad (8)$$

$$X_t = \varphi_0 + \sum_{z=1}^{p} \delta_z X_{t-z} + \sum_{i=1}^{q} {}_i Y_{t-1} + \varepsilon_t \quad (9)$$

where *Yt* and *Xt* are the tested variables, μ_t and $\square_t$ are the error terms, and *t* implies that the time period *z* and *i's* are the number of lags. The null hypothesis is $\lambda_i = {}_i = 0$ for all *i*. In the alternative hypothesis that $\lambda_i \neq 0$ and ${}_i \neq 0$ for at least some *i's* if the coefficient λ_i are significant but ${}_i$ are not significant, then *X* is Granger causal to *Y*. However, if both coefficients are significant, then causality runs both ways.

5. Findings

Table 1: Unit root test results.

Country	Variables	Intercept		Intercept + Trend	
		Level	First Difference	Level	First Difference
Malaysia	**CPI**	-2.0980	-4.7926**	-2.8429	-4.5477**
		(0.2468)	(0.0006)	(0.1941)	(0.0057)
	RGDP	-0.9689	-4.3773**	-1.1158	-4.3949**
		(0.7513)	(0.0018)	(0.9094)	(0.0082)
	M3	-2.0101	-5.1571**	-1.6589	-4.9239**
		(0.2811)	(0.0002)	(0.7443)	(0.0023)
Indonesia	**CPI**	-0.1582	-4.5316**	-1.7186	-4.4478**
		(0.9336)	(0.0012)	(0.7178)	(0.0073)
	RGDP	-1.1021	-4.0103**	-1.7462	-3.9606**
		(0.7018)	(0.0045)	(0.7041)	(0.0220)
	M3	-2.4741	-3.8544**	-0.2189	-4.4310**
		(0.1315)	(0.0065)	(0.9895)	(0.0075)
Singapore	**CPI**	-1.5721	-5.0155**	-2.9681	-4.7099**
		(0.4841)	(0.0003)	(0.1572)	(0.0039)
	RGDP	-1.0305	-4.6099**	-1.8038	-4.4882**
		(0.7292)	(0.0010)	(0.6777)	(0.0066)
	M3	-1.6176	-4.0498**	-1.7263	-4.0274**
		(0.4615)	(0.0040)	(0.7143)	(0.0190)

Notes: ***, ** and * indicates the rejection of the null hypothesis of non-stationary at 1%, 5% and 10% significance level.

Table 1 show that all variables (CPI, GDP, and M3) are non-stationary in level with constant and trend. However, in the first difference test, the result for all variables indicates that they are significant, which means that all variables are stationary. The null hypothesis is rejected, whereas the alternative hypothesis is accepted. Thus, Johansen co-integration can be carried out.

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Table 2: Co-integration test results.

Country	Rank	Max-Eigen Statistic	Critical value (Eigen) at 5%	Trace Statistic	Critical value (Trace) at 5%
Malaysia	r= 0*	36.7045	21.1316	47.4519	29.7971
	r ≤ 1	10.3249	14.2646	10.7474	15.4947
	r ≤ 2	0.4225	3.8415	0.4225	2.8415
Indonesia	r= 0*	26.4514	21.1316	32.5246	29.7971
	r ≤ 1	5.3962	14.2646	6.0733	15.4947
	r ≤ 2	0.6770	3.8415	0.6770	3.8415
Singapore	r= 0*	24.3469	21.1316	35.6575	29.7971
	r ≤ 1	7.3477	14.2646	11.3106	15.4947
	r ≤ 2*	3.9629	3.8415	3.9629	3.8415

Note: ***, ** and * indicates the rejection of the null hypothesis of non-stationary at 1%, 5% and 10% significance level.

L.R test indicates 1 co-integrating equations at the 0.05 level.

Co-integration shows that causality relationship exists in a series; however, it does not explain the direction of causal relationship. Based on the minimum value of Akaike information criterion (AIC), the lag length of order 2 is selected in Malaysia and Indonesia and the lag length of order 1 is chosen in Singapore. Table 2 shows the results of the Johansen co-integration test. The table shows that by using trace test and Max-Eigen value test, one co-integrating equation is found at 5% level in Malaysia, Indonesia and Singapore. Co-integration shows that a long-run relationship exists among inflation, money supply, and economic growth in all three countries.

Table 3: Pairwise Granger causality results.

Country	Null hypothesis	Obs	F-statistic	Prob.
Malaysia	CPI does not Granger cause GDP.	29	1.4176	0.2656
	GDP does not Granger cause CPI.		2.9948	0.0539
	M3 does not Granger cause GDP.	29	0.7504	0.5343
	GDP does not Granger cause M3.		5.5871	0.0056
	M3 does not Granger cause CPI.	29	4.0374	0.0206
	CPI does not Granger cause M3.		1.0073	0.4091

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Indonesia	CPI does not Granger cause GDP.	29	2.9723	0.0703
	GDP does not Granger cause CPI.		5.2641	0.0127
	M3 does not Granger cause GDP.	29	1.3930	0.2677
	GDP does not Granger cause M3.		3.1882	0.0592
	M3 does not Granger cause CPI.	29	3.1448	0.0612
	CPI does not Granger cause M3.		1.0699	0.3588
Singapore	CPI does not Granger cause GDP.	30	0.0032	0.9556
	GDP does not Granger cause CPI.		12.2291	0.0016
	M3 does not Granger cause GDP.	30	3.0052	0.0944
	GDP does not Granger cause M3.		3.1599	0.0867
	M3 does not Granger cause CPI.	30	9.3959	0.0049
	CPI does not Granger cause M3.		0.0246	0.8765

Table 3 presents pair-wise Granger causality between CPI, GDP, and M3. In Malaysia results indicate that CPI does not Granger cause GDP, but GDP Granger causes CPI. M3 does not Granger cause GDP, but GDP Granger causes M3. M3 Granger causes CPI, but CPI does not Granger cause M3. In Indonesia, CPI and M3 does not Granger cause GDP and M3 also does not Granger cause CPI. GDP Granger cause CPI. In Singapore, CPI does not Granger cause GDP but GDP Granger cause CPI. M3 Granger cause GDP and vice versa. M3 is found to Granger cause CPI but CPI does not Granger cause M3.

6. Conclusion and policy implications

This paper aims to investigate the relationship among money supply, economic growth, and inflation in three Southeast Asian countries (Malaysia, Indonesia and Singapore) through an empirical analysis. First, a unit root test, which is non-stationary in level and stationary in first difference, is conducted. Johansen co-integration model is then applied. Results show one co-integrating equation, thus implying that a long-run relationship exists among inflation, money supply, and economic growth in all three countries. The Granger causality model is also employed, and results show that in Malaysia money supply does not Granger cause economic growth. Economic growth does Granger cause inflation in Malaysia, Indonesia and Singapore. Causality runs from economic growth to money supply only in Malaysia. A unidirectional relationship exists from money supply to inflation in Malaysia and Singapore. Regarding money supply and inflation, result conforms to previous studies by Simkawa et al. (2012), Ahmed and Suliman (2011), Omanukwue (2010), as well as Mishra et al. (2010).

The findings in our study are highly important in policy implementation. The government should consider controlling money supply to influence economic growth because an increase in money supply can cause inflation instead of economic growth in Malaysia and Singapore. Inflation can also be a root in higher economic growth in Malaysia, Indonesia and Singapore. Similar to the findings of Bruno and Easterly (1998), our study found that inflation is needed in economic growth. However, if economic growth is rising very fast, it may accelerate inflation. Inflation is not good for any country because it

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burdens the poor. The poor has to subsist on their low income.

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Feasibility Study of Establishing Business with Charcoal Briquetting Made from Water Hyacinth and Abandoned Biomass

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ABSTRACT

Offering environment-friendly products would not only lessen the pollution but it also suggests greater benefits to the economic productivity since it is offered with lower price due to its raw materials from abandoned biomass. The purpose of the proposed project is to establish a manufacturing plant of charcoal briquette that is made up of combustible materials and water hyacinth. This study used a descriptive type of research method with survey questionnaire administered to the target respondents who were owners of restaurants that utilized charcoal for grilling. The company adopts partnership form of ownership and based on the result of the survey, the study is feasible in the region and raw materials were abundant in the nearby towns and provinces. It is resolute to establish a business which offers high quality and low priced green charcoal in the market as alternative biofuel with payback period of 4 years and 11 months based on the result of financial analysis.

Keywords: Green-Charcoal, briquetting, water hyacinth, biomass, biofuel

1. Introduction

Philippines is a biomass-rich country and usually used as household energy source and this resource is

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less understood and an underdeveloped commodity [1]. The idea of manufacturing Green Charcoal came out to give solutions for too much independence in wood charcoal to reduce too much cutting of trees and aiming to help reduction of carbon emission and air pollution. Instead of burning or dumping into landfills and river systems thereby adding pollution to the freshwater and marine environment, the leaves, twigs, grasses, and other woody items and forest wastes could now be used as valuable raw materials that can be used in the production of charcoal briquetting. Charcoal briquettes are solid fuel made from carbonized biomass, or densified biomass that is subsequently carbonized. In spite of clear advantages of charcoal briquettes that include price, burn time, environmental sustainability and potential for product standardization, their uptake as a substitute for wood charcoal [2].

Green charcoal is a powdered charcoal produced by pyrolysis of renewable vegetable waste, whether being used to enrich soil or as a source of energy, green charcoal is a step towards a cleaner more sustainable world [3]. The Philippine Department of Energy is currently promoting the development and widespread use of biomass resources by way of encouraging the pilot-testing, demonstration and commercial use of biomass combustion systems, as well as gasification and other systems for power, steam and heat generation [4].

The product is used as fire starter in some households and restaurant for grilling food such as meat, seafood, and also grilling vegetable. The target market of this product is within the area of Batangas Province in the Philippines. Manufacturing this product would be a great help to the nearby cities in the region in reducing the high growth of the water lily or hyacinth which grows in the lakeshores that causes problem to the residents during rainy season and it will also help in reduction of the abundance of waste material.

This study dealt with the feasibility of establishing a business with charcoal briquetting as a major product made from water hyacinth and abandoned biomass in Batangas Province, Philippines. It analyzed the market, technical, financial, management and socio-economic aspects of the product.

2. Materials and Methods

To describe the feasibility of the product, the proponents used the descriptive method of research. Descriptive method is a process of collecting data to answer questions concerning the current status of the subject of the study. The study determined the possible price, demand and supply for the product through interviews and questionnaires of other similar charcoal products. This study utilized the projected five years of operation through the primary guidelines such as financial analysis, payback period, returnable investments and break even analysis.

Green charcoal is made from water hyacinth and solid waste material that undergoes the process of briquetting. The emission of “green charcoal” is not dirty, explaining that it only releases hydrogen and

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not carbon dioxide, which is being blamed as one of the major causes of global warming and climate change. Charcoal is also viewed as an advanced fuel in because of its clean-burning nature and the fact that it can be stored for long periods of time without degradation.

The technical feasibility determines if the product or design can be made. This aspect is to define a comprehensive number of technical options that are feasible within known and demanded resources and requirements. These include the manufacturing processes to produce "Green Charcoal", the proposed plant size/ layout / location, machineries and tools that will be used, etc.

2.1 MANUFACTURING PROCESS

This is the process involved in manufacturing the charcoal briquetting adapted by the researchers.

1. Collect the abandoned biomass and water lily
2. Put it to the storage area
3. Transport the collected abandoned biomass and water lily to chopping area
4. Before putting the chop ingredients to metal cylindrical drum, it will undergo inspection.
5. After the inspection of the chop ingredients, put the chop ingredients on the metal cylindrical metal drum with conical chimney for carbonization
6. After loading the abandoned biomass and water lily, close metal lid with conical chimney.
7. Little amount of biomass can be used in the firing portion to ignite in the kiln and the fire portion are to be closed tightly to start the pyrolysis process.
8. After the process, biomass gets fully carbonized within 1-2 hrs.
9. Remove it to the cylindrical metal drum
10. Inspect chop ingredients are full carbonized
11. The resultant powder is used for briquetting
12. Place it to the one side
13. Next, is binder preparations and mixing
14. After preparing the binder materials put it to the briquetting machine fabrication together with the carbonized powder
15. Combine the binder materials and carbonized powder in to the briquetting machine fabrication to produce a charcoal briquette
16. Then put the charcoal briquette to the drying machine,
17. Get the dry charcoal briquette to the drying machine,
18. Bring it to the packaging area

The procedure in making the charcoal is done by heating process. The company converts of the waste materials and water hyacinth into alternative to forest wood products to be used in making the charcoal. The properties of product base on their physical and other properties: low ash content, calorific value,

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odourless, smokeless, spark less and less crack and better strength.

The company also meets criteria required to be an environmentally sustainable manufacturing process with significant benefits when compare to the traditional charcoal production. According to the Ecosystems Research and Development Bureau- Department of Environment and Natural Resources located at University of the Philippines- Los Baños, the production of Green Charcoal does not contribute to the destruction of tree forest, potentially saving about 75 to 88 trees with the diameter of a 10-centimeter.

3. Results and Discussion

The environmental friendly products are the best alternative solution to solve the problem of solid waste material and water hyacinth. The company introduces the new generation environmental product that is made from the combination of solid waste material and water lily. It is more efficient to use compared to the existing charcoal. Based on the gathered data in surveys of the different restaurants in the two major cities in the Philippines specifically in Batangas Province, the demand is high and will be accumulated by the company. The existing wood charcoals will be replaced by Green charcoal due to its demand on the succeeding years because of the environmental code. The company will offer a cheaper product rather than the existing one in order to compete in the market with lower cost.

3.1 MARKET FEASIBILITY

Market study covers the project`s profitability by meeting the unsatisfied customer demand. The price of the green charcoal covers cost of production, promotion and distribution. The product will be distributed to the different restaurants in two selected cities in the Province as the target market. There are certain factors affecting the market that may or may not be difficult to quantify or predict. These factors include demand, supply and price. The population growth, family income and expenditures, prices of substitute and complementary product, prices and supply of raw materials can affect the demand. The market aims to establish the product and its size, price to be sold, the supply situation and the nature of competition in the market, the nature and growth of the total demand for the product.

The proponents used the demand analysis to compare and be used as basis in calculating rate of increase in sales to the historical demand. Demand of each outlet/ restaurant differs because of the size of their company. Outlets that have enormous number of demand are pioneer outlets in the area. The comparative historical demand for the last five years of charcoal existence in the different distributors and restaurants in two cities shows that the demands for charcoal continuously increase. This only proves that charcoal is a necessity for people. The demand schedule shows a total of 8,667 sacks of charcoal for 2007, 9,078 sacks for 2008, total demand of 9.326 sacks of charcoal for 2009, 9,451sacks for 2010, and 12,102 sacks for 2011. The projected demand for 2012 is 13,191 sacks and it is expected that the demand will increase annually. The researchers choose the statistical straight line rather than statistical parabolic even, though

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the latter yields the smallest standard deviation because in the first, the projected demand appears to be more realistic and it increases in the future.

3.2 TECHNICAL FEASIBILITY

The company shall produce green charcoal using electrical and mechanical machineries that uses semi-automatic procedure wherein the process requires at least half of work with human intervention. This is the simplest method yet the most productive. The plant has one storey building with a total land area of land area of 17,114 square meters. The building consist of areas namely the office area, storage area, conference room, lobby area, comfort room, production area, quarters room and the raw materials area. The partners assured that the plant has already enough space to perform all the operations in which the workstation is ergonomically arranged. It enables the entire operator to work in their most efficient and effective way of doing their task.

The management have summarized the units to be produced from 2013-2014. The company will produce 50 sacks per day or 300 sacks per week. There are 20 kilos in one sack. The company will operate eight (8) hours a day, 6 days a week and 24 working days a month excluding Sunday. There is only one shift which is from 8AM to 5PM with 1 hour break from 12:00NN to 1:00PM and a break time from 2:30PM to 3:00PM. The distribution of the finished product to the distribution channels will be weekly and depends on how customer will patronize the green charcoal. The operation is expected to run for 290 days annually reducing the numbers of holidays and Sundays for the first year of operation and will change only depending on the market demand. Production capacity per month is 1300 sacks and quota per day is 50 sacks for initial year of operation and will change according to increase in demand.

In weekly production, the minimum capacity is 150 sacks per week and the maximum capacity possible production are 300 sacks. In annual production, the possible attainable production is 14500 sacks which are based on the capacity of the machine which can produce 1000kg per day of charcoal, starting from the first year of operation.

3.3 FINANCIAL FEASIBILITY

Financial study identifies the expense in the production, the cost in establishing the project itself, the things that are needed to be considered in the business are the costs of raw materials, land, building, major machinery and equipment, furniture's and fixtures and cash. The company`s total investment is US$221,211. The sharing rate will be US$73,737 each of the three owners. This capital will directly come from the owners. Financial study covers the gross amount of the total project costs to be used, the financial statement and the source of the capital. It also includes the depreciation, break-even point, net income statement, return on investment, operating profit and the payback period: 4 years and 11 months.

3.4 SOCIO-ECONOMIC FEASIBILITY

The creation of Green Charcoal enhances the creativity of the Filipinos and helps boost their morale by

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competing with other business. In addition, the business can generate additional tax revenue from its current economic slump. The products can be a substitute for the existing charcoal which is wood-based fuel. It also creates additional supply to the field of its related product. This introduction of the product also includes the social responsibilities of the company in the environment, consumers, government and in the community. One of the major goals of putting up the business is to provide employment to our local talents who have the skills and competencies in creating the product. Putting up the business can help the jobless get back on their feet and get their own living. The business will also generate more income for the supplier of raw materials creating favorable effects for them. It is also worthy to say that materials used are 100 percent environment friendly.

3.5 MANAGEMENT FEASIBILITY

It represents the supervision of process before and during the actual operation such as project, so with the people involved in the production and operation. The proposed project is also considered organizing a competitive human source that will structure the marketing, production, administrative, and support functions of a highly competitive organization. It is also determined by establishing a strong marketing organization that will redefine the distribution in a mass marketing environment. It will do its best to innovate and to create marketing strategies and which aims to be become a leader in distribution of this product in the desired region. The volume of the investment will be used in construction of building, purchase of equipment for production, furniture and supplies, inventories and materials and for the salaries and wages of employees. Major expenses during operation process include the wages of employees and the machines needed in manufacturing.

4 CONCLUSION

The proponents found out that the proposed product is feasible and profitable within the projected five years of operation. The company will continue its operation and adhere with its social responsibility, in line with its beneficial outcome. There are several environmental benefits from Charcoal briquetting not only it reduces pressure in cutting/using wood from the natural forest, which is traditionally used for charcoal production in the upland it would also help in the reduction of pollution especially carbon dioxide; production of an environment friendly biofuel and it also served as a source recovery of agro forestry wastes.

Marketing studies to better understand consumer preferences in fuel and stove attributes, better enforcement of existing forestry and charcoal regulations, reduced regulatory hurdles for registering new briquette businesses, targeted tax exemptions, and expansion of consumption to new industrial and other consumers (Mwampamba et al, 2013).

The price of the Green Charcoal is cheaper than any brand; the proponents concluded that this study is feasible in the region where the product will be made available. With the help of the survey, the proponent’s found out that the demand and supply varies. Return on investment of the manufacturing will

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be ten percent at the end of five years and the payback period is four years and 11 months which is more realistic. The proponents also assure that all the ingredients do not contain chemicals that cannot be reverted to their natural elements and that the quality of the ingredients is also considered. The proponents guarantee that Green Charcoal is a quality product that helps to reduce dependence on the fire wood. This product also is a 100 percent eco-friendly product.

To maintain a good marketability of the product, there should be a well-planned marketing strategy to be implemented and carefully planned project schedule for the success of the business. The existing company should find ways to decrease the operating cost through productivity improvement. With this, the company will be able to gain profit in a span of time. This productivity will use time and motion study. This will help the company to eliminate loss of time in working. The proponents also recommend reusing the ash of the charcoal as fertilizer.

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TECHNICAL AND RISK EFFICIENCY EVALUATION OF INDIAN COMMERCIAL BANKS USING DEA MODELS

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ABSTRACT

This study proposes data envelopment analysis models to identify and asses risk in Indian commercial banks. Risk is believed to surface due to external and internal factors, where the former cannot be controlled and the later can be controlled by the bank management. We assume that non performing assets (NPA) arise due to endogenous and exogenous risk. 63 commercial banks comprising public, private and foreign sectors exposed to common frontier production function are considered for performance evaluation. Due to exogenous risk inefficiency more inputs are lost in public sector than private and foreign sectors. More inputs are freely disposed off in private sector than public and foreign sector due to endogenous risk inefficiency. Private sector banks operate more distantly from optimal scale than the public and foreign sector banks.

Keywords: Data Envelopment Analysis, Endogenous Risk, Exogenous Risk, Technical Efficiency, Scale Efficiency, Commercial Bank.

1. INTRODUCTION:

Due to globalization several foreign banks started to operate on Indian soil. The changes that are taking place world wide continued to give shocks to the banking system which resulted in an expansion of banking services both in range, volume and non-performing assets.

Measuring Commercial banks' efficiency is an important task to bank management and the policy maker. Before we contemplate to measure efficiency 'commercial bank' has to be modeled suitably to meet the objectives of the analyst.

A commercial can be modeled following two approaches, the intermediation and production approach. Under the intermediation approach financial institutions are viewed to intermediate funds between depositors and borrowers (Piyu, Y., 1992). In production approach a commercial bank's

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resources produce services to the customers (Berg et.al, 1991; Berg et.al. 1993; Parson et.al, 1993; Shaffnit et.al, 1997). The basic difference between the two approaches is that in production approach deposits are treated as output, where as they are viewed as an input in intermediation approach.

Variables similar to Non-Performing Assets (NPAs) were used in commercial bank efficiency measurement by Brocket et.al (1997), Pastor J.M (1999) and Sueyoshi (2001). In the context of Indian Commercial Banks' performance measurement adequate representation is not given to risk as measured by NPAs (Bhattacharya et.al, 1996; Asish Saha, T.S.Ravisankar 2000).

2. DATA:

Performance of banks and bank branches was studied by a number of analysts, but unfortunately there is no general agreement of choice of technology in terms of inputs and outputs.(Bhattacharya et.al, 1996; Parson et.al, 1993; Hevary Tulkers 1993; Berger et.al, 1993; English et.al,1993; Chaffai 1997; Brocket et.al 1997; De Yong Reber 1997; Mester Loreta 1997; Humphrey David 1993; Berg et.al, 1991; Kumbhakar et.al, 1998).

The present study models a commercial bank in production approach perspective. The study accommodates non-performing assets as an input.

For the inputs we use (1) Number of employees (2) Fixed Assets and (3) Non-Performing Assets. Outputs are (1) Deposits (2) Loans and Advances (3) Investments and (4) Non- interest income. The data are secondary arise from the balance sheets submitted to the Reserve Bank of India for the period 2010- 2011 by the commercial banks.

To assess efficiency of Indian commercial banks Data Envelopment Analysis (DEA) models are used as chief tools. Adding too many inputs and outputs to DEA list of variables in the presence of too small a number of Decision Making Units (DMUs) leads to loss of discriminatory power of DEA, since in this case a large proportion of DMUs will surface with 100% efficiency score (Hughs and Yaisawarng, 2004). Thus, an analyst shall be objective oriented and parsimonious while inputs and outputs are listed to confront with DEA. The present study considers 63 Public, Private and Foreign sector banks.

STOCHASTIC FRONTIERS:

Efficiency evaluation can also be pursued estimating **stochastic frontier production functions**. (Forsund, et.al., 1980; Lee, 1983; Schmidt and Lovell, 1979; Kopp and Diewert, 1982; Kumbhakar, 1987; Battese and Coelli, 1992, 1995; Shephard, 1970, 1974; Fare, et.al., 1988, 1992; and Fare and Grosskopf, 1994). One output and multi-input stochastic frontier production functions were used to estimate output technical efficiency. These models can not be implemented when outputs are multiple. However, multiple outputs and multiple inputs can be dealt with simultaneously, estimating stochastic output distance function, with two error terms one accounting for efficiency variation and the other pure noise. Estimation of risk efficiency fitting output distance function is out of the scope of this paper.

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3. DATA ENVELOPMENT ANALYSIS (DEA) MODELS:

Four linear programming problems are used to decompose overall technical efficiency multiplicatively into its sources, viz., Exogenous Risk, Endogenous Risk, Scale and Pure Technical Efficiency.

$$Z(CCR,u_0)=\text{Min}\left\{\lambda:\sum_{j=1}^{n}\lambda_j x_{ij}\le\lambda x_{i0};\sum_{j=1}^{n}\lambda_j u_{rj}\ge u_{r0};\lambda_j\ge 0,i=1,2,\ldots,m;r=1,2,\ldots,s\right\}$$

$$Z(BM,CCR,u_0,u_{b0})=\text{Min}\left\{\begin{array}{r}\lambda:\sum_{j=1}^{n}\lambda_j x_{ij}\le\lambda x_{i0};\sum_{j=1}^{n}\lambda_j u_{rj}\ge u_{r0};\ \sum_{j=1}^{n}\lambda_j u_{bj}\le u_{b0};\lambda_j\ge 0\\ i=1,2,\ldots,m;r=1,2,\ldots,s\end{array}\right\}$$

$$Z(BM,CCR,u_0)=\text{Min}\left\{\begin{array}{r}\lambda:\sum_{j=1}^{n}\lambda_j x_{ij}\le\lambda x_{i0};\sum_{j=1}^{n}\lambda_j u_{rj}\ge u_{r0};\ \sum_{j=1}^{n}\lambda_j u_{bj}\le\lambda u_{b0};\lambda_j\ge 0\\ i=1,2,\ldots,m;\ r=1,2,\ldots,s\end{array}\right\}$$

$$Z(BM,BCC,u_0)=\text{Min}\left\{\begin{array}{r}\lambda:\sum_{j=1}^{n}\lambda_j x_{ij}\le\lambda x_{i0};\sum_{j=1}^{n}\lambda_j u_{rj}\ge u_{r0};\ \sum_{j=1}^{n}\lambda_j u_{bj}\le\lambda u_{b0};\sum\lambda_j=1\\ \lambda_j\ge 0;\ i=1,2,\ldots,m;\ r=1,2,\ldots,s\end{array}\right\}$$

$Z(CCR,u_0)$ is the traditional DEA model of Charnes, Cooper and Rhodes which assumes that outputs are exogenous and inputs are endogenous and it seeks to find potential inputs required to produce u_0, with input mix given no importance, which means that there is no change of technique. This is overall measure of technical efficiency. The constraint of NPAs ($=u_b$) is ignored while it is computed.

Measurement of Risk Efficiency:

The commercial banks are governed by risk environment which vary from one bank to another. This paper refers to credit risk and non-performing assets are assumed to proxy credit risk. $Z(BM,u_0,u_{b0})$ is the Banker and Morey (BM, 1986) model whose solution space is more restricted since we have augmented an extra constraint representing risk environment to the constraints of $Z(CCR,u_0)$. We obtain the inequality,

$$Z(CCR,u_0)\le Z(BM,u_0,u_{b0})$$

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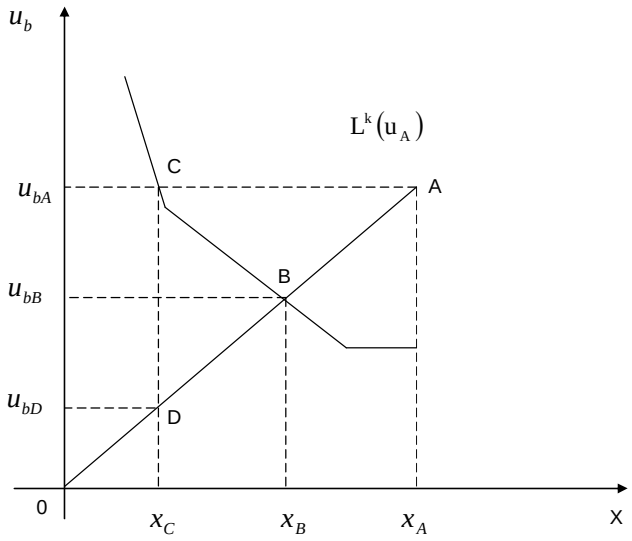

Figure: Exogenous and Endogenous Risk

In the above figure input 'x' and NPAs ($=u_b$) are measured along vertical axis. $L^k(u_0)$ is the input level set consisting of all inputs capable of producing output u_A. If output is exogenous, input and NPAs are endogenous, we have

$$x_B = Z(BM, CCR, u_A)\, x_A$$

However, if output and NPAs are exogenous,

$$x_C = Z(BM, u_A, u_{bA})\; x_B$$

The ratio $\left(OD/OB\right)$ measures endogenous risk efficiency.

$$\frac{OD}{OB} = \frac{Z(BM, u_A, u_{bA})}{Z(BM, CCR, u_A)}$$

Following Fare et.al (2004), the left hand ratio in the following can be recognized as the measure of overall risk efficiency.

$$\underbrace{\frac{Z(CCR, u_A)}{Z(BM, CCR, u_A)}}_{\text{Overall Risk Efficiency}} = \underbrace{\left[\frac{Z(CCR, u_A)}{Z(BM, u_A, u_{bA})}\right]}_{\text{Exogenous Risk Efficiency}} \underbrace{\left[\frac{Z(BM, u_A, u_{bA})}{Z(BM, CCR, u_A)}\right]}_{\text{Endogenous Risk Efficiency}}$$

$Z(BM, BCC, u_0)$ measures input pure technical efficiency. It is obtained by augmenting to the constraints of $Z(BM, CCR, u_0)$, the convexity constraint suggested by Banker, Charnes and Cooper (BCC, 1984). Thus, we have the inequality

$$Z(CCR, u_0) \le Z(BM, u_0, u_{b0}) \le Z(BM, CCR, u_0) \le Z(BM, BCC, u_0)$$

consequently, the following multiplicative decomposition:

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$$Z(CCR,u_0)=\underbrace{\left[\frac{Z(CCR,u_0)}{Z(BM,u_0,u_{b0})}\right]}_{\text{Exogenous Risk Efficiency}}\underbrace{\left[\frac{Z(BM,u_0,u_{b0})}{Z(BM,CCR,u_0)}\right]}_{\text{Endogenous Risk Efficiency}}\underbrace{\left[\frac{Z(BM,CCR,u_0)}{Z(BM,BCC,u_0)}\right]}_{\text{Sale Efficiency}}\underbrace{[Z(BM,BCC,u_0)]}_{\text{Pure Technical Efficiency}}$$

4. EMPIRICAL ANALYSIS:

We evaluate the performance of 63 commercial banks operating on Indian soil. These constitute public, private and foreign sector banks. Unlike traditional decomposition the overall input technical efficiency is decomposed into endogenous, exogenous, scale and pure technical efficiency, the decomposition being multiplicative. Instead of bank wise, we report sector wise average efficiencies.

Table (1): Mean Efficiency Scores, Standard Deviation

Sectors	$Z(CCR,u_0)$	$Z(CCR,u_0,u_{b0})$	$Z(BM,CCR,u_0)$	$Z(BM,BCC,u_0)$
Public	0.3174 (0.1132)	0.7908 (0.1797)	0.8138 (0.1671)	0.9587 (0.0452)
Private	0.2965 (0.1508)	0.5464 (0.2688)	0.5995 (0.2339)	0.9943 (0.0138)
Foreign	0.6845 (0.2831)	0.8507 (0.2039)	0.8727 (0.1849)	0.9829 (0.0244)

Table (2): Mean Efficiency Scores of Risk and Scale Efficiency

Sectors	Exogenous Risk Efficiency	Endogenous Risk Efficiency	Scale Efficiency
Public	0.4020 (0.0914)	0.9675 (0.0344)	0.8471 (0.1597)
Foreign	0.7920 (0.2534)	0.9716 (0.0678)	0.8774 (0.1834)
Private	0.5909 (0.1916)	0.8608 (0.1732)	0.6103 (0.2381)

In the above table sectoral mean efficiency scores are furnished. The values in the parentheses are standard deviations of efficiency scores. The overall input technical efficiency scores are $Z(CCR,u_0)$. These scores assume that implicit in them the influence of risk as measured by NPAs ($=u_b$) and scale efficiency differences. Foreign sector banks' performance is better compared to public and private sector banks. The foreign sector banks experienced 32 percent input losses due to overall technical inefficiency. Low efficiency scores of public and private sector banks reveal that these banks shall adjust their scale of operation towards optimal scale (constant returns to scale), strengthen internal risk control system and adjust their operations suitably to face exogenous risk.

In regression to purge the dependent variable from the influence of an explanatory variable, later is regressed on the former. To disentangle the influence of a variable from an efficiency score, the later is expressed as an additional constraint. NPAs are expressed as an additional constraint, $Z(BM,u_0,u_{b0})$ are obtained. Recognition of NPAs as a constraint dramatically increased the mean efficiency scores of public, private and foreign sector banks. Input losses are found more in private sector than public and foreign sector banks. This observation implies that exogenous credit risk is an important source of commercial banks' radial overall efficiency scores. **It also implies that the public sector banks are hurt due to exogenous credit risk more than private and foreign sector banks.**

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The efficiency score $Z(BM, u_0, u_{b0})$ still found influenced by endogenous credit and scale efficiency differences. While exogenous risk arises due to non-discretionary factors like lending to priority sectors at below market rate of interest, competition from rival banks, and lack of freedom to adjust, endogenous risk arises due to weakness of the internal risk control system.

$Z(BM, u_0, u_{b0})$ can be purged off the endogenous risk component by recognizing that NPAs can be reduced strengthening internal risk control system administering controls on the size of the loans, careful evaluation of the creditability of the borrower, demanding adequate collateral security, looking for investments leading to better opportunity costs, motivating employees to make them feel their belongedness and spreading risk.

The private sector banks experienced huge input losses compared to public and foreign sector banks as revealed by the efficiency scores $Z(BM, CCR, u_0)$. This fact reveals that the internal risk control system is the weakest for private sector banks than public and foreign sector banks.

The commercial banks of India vary significantly in size. We disentangle the scale differences from $Z(BM, CCR, u_0)$ by augmenting the convexity constraint suggested by Banker, Charnes and Cooper (BCC, 1984). The resulting efficiency scores $Z(BM, BCC, u_0)$ measure input pure technical efficiency. The resulting mean scores are close to one, 96%, 98% and 99% respectively for public, private and foreign sectors.

The ratio $\frac{Z(CCR, u_0)}{Z(BM, u_0, u_{b0})}$ measures exogenous risk efficiency. The public sector banks appear to suffer more from exogenous risk than the foreign and private sector banks. This is expected since the public sector banks are to look after government's programs such as granting loans to priority sector at less than market rates of interest, to weaker sections against poor collateral securities and so on. The mean differences of exogenous risk efficiency of any two of the sectors is significantly different from zero at $p < 0.01$.

The ratio $\frac{Z(BM, u_0, u_{b0})}{Z(BM, CCR, u_0)}$ measures endogenous risk efficiency. Private sector banks experience input losses more than the public and foreign sector banks. These banks, therefore, possess weaker internal risk control system than the other two sectors of banks on an average. Public and private sectors behave alike when they dealt with endogenous risk. Between public and private; private and foreign the mean differences of endogenous risk efficiency are found significant at $p < 0.01$.

The ratio $\frac{Z(BM, CCR, u_0)}{Z(BM, BCC, u_0)}$ measures input scale efficiency. The mean scale efficiency scores imply that the departure of private sector from optimal scale is more than the public and foreign sector. In terms of scale efficiency the public and foreign sectors behave alike as their mean difference of scale efficiency does not differ significantly from zero. Between public and private; private and foreign sector banks the mean scale efficiency differences are significant at $p<0.01$.

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CONCLUSIONS:

This study decomposes multiplicatively the overall technical efficiency into exogenous risk, endogenous risk, scale and pure technical efficiency. It is assumed that Non-Performing assets capture the risk component involved in commercial bank business. The risk faced by a commercial bank arises from forces operating from outside and within leading to exogenous and endogenous risk respectively.

The study compares 63 commercial banks comprising public, private and foreign sector banks against a common non-parametric production frontier. The empirical results reveal that exogenous risk is menace more to the public sector than foreign and private sector banks. The built in risk control system is equally strong for public and foreign sector banks. The private sector banks experienced significantly more input losses than public and foreign sector banks due to endogenous risk inefficiency. This banking sector should strengthen its internal risk control system.

Private sector banks appear to operate more distantly from optimal scale than public and foreign sector banks. The foreign sector banks are well ahead in their performance compared to public and private sector banks.

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APPENDIX-I

$$Z(BM, CCR, u_0) = Min\{\lambda : \lambda(x, u_b) \in L^k(u_0)\}$$
$$= Min\{\lambda : \lambda f(u_b)x \in L^k(u)\}$$
$$= [f(u_b)]^{-1} Min\{\lambda f(u_b) : \lambda f(u_b) x \in L^k(u)\} \Rightarrow \{\text{NPAs have neutral effect on all the inputs}\}$$
$$= [f(u_b)]^{-1} Min\{\delta : \delta x_0 \in L^k(u_0)\}$$
$$= [f(u_b)]^{-1} Z(CCR, u_0)$$
$$f(u_b) = \frac{Z(CCR, u_0)}{Z(BM, CCR, u_0)}$$

$f(u_b)$ measures overall risk efficiency.

This can be decomposed into exogenous and endogenous risk efficiencies.

APPENDIX-II

(1) PUBLIC SECTOR BANKS

S.NO	Bank Name	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	State Bank of India	0.2992	1.0000	1.0000	1.0000	0.2992	1.0000	1.0000
2	State Bank Bikaner & Jaipur	0.3408	0.8849	0.9037	0.9958	0.3851	0.9792	0.9075
3	State bank of Hyderabad	0.3439	0.8837	0.9097	0.9543	0.3892	0.9714	0.9533
4	State Bank of Indore	0.3809	0.8469	0.8510	0.9979	0.4498	0.9952	0.8528
5	State Bank of Mysore	0.2946	0.7238	0.7725	0.9666	0.4070	0.9370	0.7992
6	State bank of Patiala	0.4284	1.0000	1.0000	1.0000	0.4284	1.0000	1.0000
7	State bank of Saurashtra	0.2218	0.4773	0.4950	0.9591	0.4647	0.9642	0.5161
8	State Bank of Travancore	0.3679	0.8764	0.8783	1.0000	0.4198	0.9978	0.8783
9	Allahabad Bank	0.2651	0.5593	0.5962	0.9082	0.4740	0.9381	0.6565
10	Andhra Bank	0.3463	1.0000	1.0000	1.0000	0.3463	1.0000	1.0000
11	Bank of Baroda	0.3107	0.9386	0.9488	0.9589	0.3310	0.9892	0.9895
12	Bank of India	0.3201	0.9960	0.9964	1.0000	0.3214	0.9996	0.9964
13	Bank of Maharashtra	0.2689	0.6861	0.7618	0.9763	0.3919	0.9006	0.7803
14	Canara Bank	0.2783	0.6269	0.6612	0.8181	0.4439	0.9481	0.8082
15	Central bank of India	0.2060	0.6772	0.7038	0.9268	0.3042	0.9622	0.7594
16	Corporation Bank	0.3752	0.8978	0.9192	0.9728	0.4179	0.9767	0.9449
17	Dena Bank	0.2430	0.5360	0.5454	0.9760	0.4534	0.9828	0.5588
18	IDBI Ltd.	0.7833	1.0000	1.0000	1.0000	0.7833	1.0000	1.0000
19	Indian Bank	0.2012	0.7119	0.7556	0.8951	0.2826	0.9422	0.8442
20	Indian Overseas Bank	0.3006	0.8673	0.8856	0.9310	0.3466	0.9793	0.9512
21	Oriental Bank of Commerce	0.4353	1.0000	1.0000	1.0000	0.4353	1.0000	1.0000

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22	Punjab & Sind Bank	0.1807	0.4520	0.4673	0.9442	0.3998	0.9673	0.4949
23	Punjab national Bank	0.2677	0.8601	0.8707	0.8767	0.3112	0.9878	0.9932
24	Syndicate Bank	0.2912	0.7692	0.8229	0.9313	0.3786	0.9347	0.8836
25	UCO Bank	0.2730	0.6683	0.7266	1.0000	0.4085	0.9198	0.7266
26	Union bank of India	0.3163	0.7941	0.8329	0.9462	0.3983	0.9534	0.8803
27	United Bank of India	0.1880	0.4635	0.5360	0.9257	0.4056	0.8647	0.5790
28	Vijaya Bank	0.3588	0.9446	0.9463	0.9819	0.3798	0.9982	0.9637

(2) FOREIGN SECTOR BANKS:

S.NO	Bank Name	(1)	(2)	(3)	(4)	(5)	(6)	(7)
29	ABN Amro bank	0.6895	1.0000	1.0000	1.0000	0.6895	1.0000	1.0000
30	Abu Dhabi Commercial Bank	0.9239	0.9239	0.9239	1.0000	1.0000	1.0000	0.9239
31	American Express Bank	0.1208	0.5921	0.7690	0.9905	0.2040	0.7700	0.7764
32	Bank of Bahrain & Kuwait	0.3739	0.3739	0.3739	0.9979	1.0000	1.0000	0.3747
33	Bank of Ceylon	0.8064	0.8064	0.8064	1.0000	1.0000	1.0000	0.8064
34	Bank of Tokyo-Mitsubishi UFJ	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
35	Chinatrust Commercial Bank	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
36	Citi Bank	0.7371	1.0000	1.0000	1.0000	0.7371	1.0000	1.0000
37	Deutsche Bank	0.6148	1.0000	1.0000	1.0000	0.6148	1.0000	1.0000
38	Hong Kong & Shanghai Banking Corporation	0.4722	0.8009	0.8266	0.9520	0.5896	0.9689	0.8683
39	JB Morgan Chase bank	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
40	Standard Chartered Bank	0.4755	0.7107	0.7723	0.9909	0.6691	0.9202	0.7794

(3) PRIVATE SECTOR BANKS:

S.NO	Bank Name	(1)	(2)	(3)	(4)	(5)	(6)	(7)
41	Axis Bank	0.5112	1.0000	1.0000	1.0000	0.5112	1.0000	1.0000
42	Bank of Rajasthan	0.2238	0.5351	0.5632	0.9680	0.4182	0.9501	0.5818
43	Catholin Syrian Bank	0.1644	0.3254	0.3919	0.9905	0.5052	0.8303	0.3957
44	Centurion Bank of Punjab	0.1159	0.2515	0.3891	0.9303	0.4608	0.6464	0.4183
45	Citi Union Bank	0.2725	0.4994	0.5641	0.9922	0.5457	0.8853	0.5685
46	Development Credit bank	0.2082	0.3646	0.4358	0.9889	0.5710	0.8366	0.4407
47	Dhanalakshmi bank	0.1893	0.3041	0.4082	0.9920	0.6225	0.7450	0.4115
48	Federal Bank	0.3419	0.7654	0.7745	0.9726	0.4467	0.9883	0.7963
49	HDFC Bank	0.2874	0.8221	0.8514	0.9008	0.3496	0.9656	0.9452
50	ICICI Bank	0.6919	1.0000	1.0000	1.0000	0.6919	1.0000	1.0000
51	Induslnd Bank	0.5864	0.9127	0.9164	1.0000	0.6425	0.9960	0.9164
52	Ing Vysys bank	0.2961	0.4889	0.5056	0.9572	0.6056	0.9670	0.5282
53	Jammu & Kashmir Bank	0.3601	0.8196	0.8262	0.9966	0.4394	0.9920	0.8290

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54	Karnataka Bank	0.3180	0.7031	0.7200	0.9909	0.4523	0.9765	0.7266
55	Karur Vysya Bank	0.3007	0.5790	0.6086	0.9760	0.5193	0.9514	0.6236
56	Kotak Mahindra bank	0.2920	0.5697	0.7157	1.0000	0.5126	0.7960	0.7157
57	Lakshmi Vilas bank	0.2953	0.5581	0.6160	0.9967	0.5291	0.9060	0.6180
58	Lord krishna Bank	0.1389	0.1666	0.3457	0.9990	0.8337	0.4819	0.3460
59	Ratnakar bank	0.1355	0.1355	0.2449	0.9952	1.0000	0.5533	0.2461
60	Sangli Bank	0.0584	0.0584	0.1326	0.9837	1.0000	0.4404	0.1348
61	SBI Comm.& Intl Bnak	0.4509	0.4509	0.4509	0.9976	1.0000	1.0000	0.4520
62	South Indian Bank	0.3063	0.7056	0.7266	0.9879	0.4341	0.9711	0.7355
63	Tamilnad Mercantile Bank	0.2748	0.5516	0.6003	0.9901	0.4982	0.9189	0.6063

(1) $= Z(CCR, u_0)$,
(2) $= Z(BM, u_0, u_{b0})$,
(3) $= Z(BM, CCR, u_0)$,
(4) $= Z(BM, BCC, u_0)$

(5) $= \dfrac{Z(CCR, u_0)}{Z(BM, u_0, u_{b0})}$,
(6) $= \dfrac{Z(BM, u_0, u_{b0})}{Z(BM, CCR, u_0)}$,
(7) $= \dfrac{Z(BM, CCR, u_0)}{Z(BM, BCC, u_0)}$

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CUSTOMER TECHNOLOGY READINESS AND ORGANISATIONAL PERFORMANCES IN G T BANK NIGERIA PLC

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Abstract: In 199, Guaranty Trust Bank Plc (GT Bank) commenced as limited liability Company to provide commercial and other banking services in 1991 and grew to be one of the most respected banks. By 1996 she became a public quoted company and won the Nigerian Stock Exchange President's Merit Award and won subsequent years. This paper is to appraise Customer Technology Readiness and Organisational Performance in GT Bank Nigeria. This study adopted survey research design with structured questionnaire administered to 150 staff of GT Bank Head Office and the regional offices in Lagos State. The data analysis was presented in simple percentage and cross tab used to test hypotheses. Telephone banking enhances efficiencies banking services as customers are attracted to customised technology-based bank product, simplified e-banking with efficient service delivery to customers and that customers preferred a bank that regularly updates them on their accounts and transaction status as revealed.

Key words: Customer Technology Readiness, Organisational Performance, GT Bank

INTRODUCTION: These days technology turns to be a leading driving force in performing businesses (Tavares, 2000) and everything seems to be possible with technology. Hence it is paramount important to research into the investments in readiness of customers visa- a- visa their impact in banking business (Saunder and Walter, 1994; Seith and King, 1994). It is essential to assess how technology is reducing the labour intensive activities, services and processing cost, increasing service levels and consequently improving the productivity and competitiveness of Nigerian banking sector.

Studies showed the relationship between service quality, customer satisfaction and financial performance

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where face-to-face interaction between customer and employees is the only focus but lately, however, technology has had a remarkable influence on the growth of service delivery options (Dabholkar and Bagozzi, 2002) However, there is the notion that if customer has direct contact with the technology, there is a greater control such as with internet banking while lack of direct contact leads to less control as perceived by the customer during the transaction (Dabholkar,1994). Herein Nigeria, technology innovation has influenced how things are done especially banking performances. In fact, for the past ten years tremendous achievements have been accomplished in banks networking, service delivery, profitability and customers responses. The workers were made to cope with the ever increasing demands of Information Communication Technology (ICT) has dominated global banking industry, however, customers were not left out as they also benefitted from the improving networking service delivery which inevitably improved banks competitiveness and profitability. It can be said that the whole race of these innovations and huge spending to outdo one another in the latest technology is to satisfy customers through efficient service delivery or else the customers will leave for the other eagerly waiting competitors (Dauda and Akingbade, 2011).

For these innovations to influence the overall organisational performance depends largely on customer's ability to accept or reject the technology that is, the function of technology readiness. Therefore, technology readiness refers to people's propensity to embrace and use new technologies for achieving goals in home life and at work (Liljander et al, 2006); Parasuraman and Colby, (2001). Technology readiness can be categorised into four distinct components namely; Optimism, Innovativeness, Discomfort and Insecurity depending on how it is deployed and perceived, it can make or mar or have no significant influence on the organisational performance.

Strategically deployed technology can save time and money thereby eliminate errors which address some issues associated with exchanging cultural and social trends. This can also minimise direct customer interaction and any associated service value to be gained (Bitner, 2000). This can turn to be a problem as opined by Joseph et al, (2003), as preference of e-banking technology in banks may depend on how personalised the service is user friendliness, network availability and a host of others which if not

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available may signal wrong impression to customers.

The purpose to examine customer technology readiness in Nigerian bank as it affects organisational performance is necessary while the objectives are to establish the relationship between technology and service quality in banking industry. Amongst the objectives are: to determine the factors that lead to customer preference of different electronic banking channels, to evaluate the determinants of customer technology readiness and also to assess the relationship between customer technology readiness and organisational performance.

Now, how does technology influence service quality in banking industry? What are the determinants of customer readiness? What factors lead to customer preference of different electronic banking channels? Is there any relationship between customer technology readiness and organisational performance? These are the questions to be answered in the quest to agree or not that customer technology readiness and organisational performance in Nigeria banks is practicable.

Winners of here now are those who overcome consumer cynicism by exceeding expectation and get beyond the point of encounter, hence they are successful as they invest for the long term through recognising that service fulfilment not only promotes growth of their customer base but also retains customer loyalty (Laudon and Laudon, 2010). The challenging business environment in financial service market has also resulted in more pressure on banks to develop and utilise delivery channels so as to attract more customers, improve customers' perceptions and encourage loyalty (Parasuraman et al, 1985).

Current service providers need to mobilise all the internal energies in order to face the ever increasing competitors and a changing market environment. Knowing customers and the ability to provide flexible services has become crucial to building customer loyalty. Regards to technology intensive services, customer technology readiness has an impact on the perception of the market offering and thus has profound implications for the marketing practice of high-tech products (Parasuraman, 2001). It is

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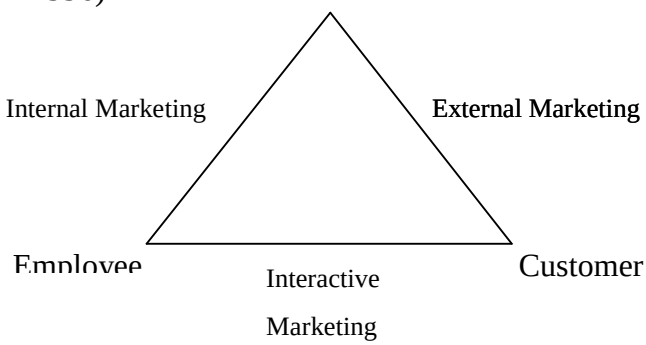
obvious that most of banking industry customers are pioneers and sceptics. Pioneers in the sense that they place emphasis on prices while, sceptics place emphasis on value quality. It is obvious that education and gender are significantly related to technology readiness which in turn significantly impacts service quality and value perceptions as well as customer loyalty.

Nowadays, a lot of organisations are challenged by the dynamics of service encounters as the role of technology in customer-company interactions and the number of technology-based products and services grow rapidly (Parasuraman, 2000). However, technology has two components; a hardware which consist of the tool that embodies the technology as a material or physical object and the software being the information based for the tool (Rogers, 1995), hence, Rogers defined innovation as an idea, practice or object which is perceived as new by people or other unit of adoption. Also technology is striving fresh, novel and unexpected (Parasuraman and Colby, 2001).

Innovation affects firms in many ways, including increased profits and enhanced shareholder value. Past researches opine that winning firms are innovative firms that generate competitive advantage through new idea and new products (Kandampully, 1998). Capturing the complexities metamorphosing from the growing technology dimension in service provision, Parasuraman, (2001) proposed a pyramid model of service marketing by extending Kotler's 1994 triangle model of service marketing. Both triangle and pyramid models have 3 end points without technology and it added external marketing activities pertaining to 4Ps (Product, Price, Promotion, and Place) that are emphasised in the marketing of goods because effective marketing needs both internal and interactive marketing since services are provided by people, the selection, training and motivation of employees can all tend to make huge difference in customer satisfaction demonstrated below, (Wan-I et al, 2009)

Triangle Model (Kotler, 1991)



Pyramid Model (Parasuraman, 1996)

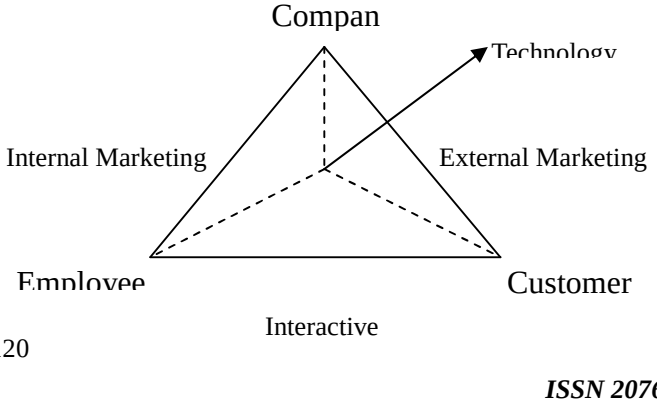


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Fig. I Fig. II

Source: Wan-I et al, (2009) Technology Readiness in the Quality-Value-Loyalty Chain.

From the above diagram, interactive should imbibe employees exhibiting competences, caring attitude, responsiveness, initiatives, problem solving abilities and be friendly to customers. But due to the current proliferation of technology in the process through which products and services are purchased and consumed, the triangle model fell short of fully reflecting all the linkages involved in seller-buyer exchanges, while the pyramid model addresses this short fall by adding technology as a 3rd dimension to the 2 dimensional triangle model thereby emphasising the need for effective managing 3 new linkages-company technology, technology-employee and technology-customer to maximise marketing effectiveness (Venkataraman, 2001).

It is noted that leading financial institution with those that would survive the competitions and challenges of tomorrow's banking must embrace the multiple benefits of information technology (Techno Brands Review, 2001). Information technology comprises of the entire electronic infrastructure and facilities employed by banks of today, but in the accurate justification and processing of incidence of high transaction volumes and values Gronoroos, (2001). To ascertain if customer technology readiness and organisational performance in Nigeria banks is through the test of hypotheses as shown below:

Hypothesis I

H_o: There is no relationship between customer technology readiness and organisational performances

$H_{I:}$ There is relationship between customer technology readiness and organisational performances.

In testing the above hypothesis, question 15 was cross tabulated with question 25.

Presenting the Cross tabulation Result of Test of Hypothesis I

Chi-Square Value	Significance	Phi	Cramer's V
61.7	0.00	65.7%	32.8%

Source: SPSS Output Analysis

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Decision and Implication: Since the significant value is 0.00, we accept the alternate hypothesis. More so, the Phi and Cramer's V result indicates significant association between the dependent and independent variables. This implies that when customers are ready to adopt ICT products on offer in a bank, there is a tendency that organizational performance indices would improve.

Hypothesis II

H_0: Customers' perceptions do not influence technology usage.

H_1: Customers' perceptions influence technology usage.

In testing the above hypothesis, question 3 was cross tabulated with question 26.

Presenting the Cross Tabulation Result of Test of Hypothesis II

Chi-Square Value	Significance	Phi	Cramer's V
48.2	0.00	58%	29%

Source: SPSS Output Analysis

Decision and Implication: Since the significant value is 0.00, we accept the alternate hypothesis. More so, the Phi and Cramer's V result associations between the dependent and independent variables and this is noted to be significant. The implication of this is that perceptions of customers would influence their decisions to use some ICT driven products.

Findings

The thrust of this study is to assess customer technology readiness as it affects organizational performance in the banking industry, a very key industry in any economy that performs financial intermediation. The overall results from the statistical output are that most mean are situated between 3 and 4 and this signifies affirmative tendencies. In addition, the cross-tabulation results support this tendency. For managerial staff, a statistically significant association holds sway between customer

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technology readiness and organizational performance as well as customers' perceptions and technology usage.

Further, as revealed in the study, the key indices in the study revealed that the challenges that can be faced in implementing ICT driven products in the bank include: persistent long queue, poor network, fraud-prone technology, undifferentiated electronic products as well as late adoption.

As stated earlier, the study was out to investigate customer technology readiness and organizational performance in GT Bank Plc. major findings showed that:

- Respondents see electronic banking as a typical component of information technology driven banking.
- Telephone banking enhances efficient banking services.
- Respondents are attracted to customised technology-based bank product.
- Simplified e-banking product means efficient service delivery to respondents.
- Respondents are always well motivated by incentives to use my bank's new technology.
- Respondents prefer banks with very low chances of fraud for my electronic banking transactions.
- Respondents prefer a bank with stable and steady network in doing transaction.
- Speed of service delivery is a key determinant of respondents for electronic banking products.
- Respondents prefer a bank with a warm reception and prompt solution to their complaints on ATM cards and the likes.
- Respondents prefer a bank with minimal deductions on ATM usage and other IT based products.
- Respondents would prefer a bank that prioritizes involvement of customers on product development.

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- Respondents prefer a bank who's Information Technology has enhanced the speed of feedback and customer solution provision.
- Respondents prefer a bank that regularly updates them on their account and transaction status.
- Quality of service on offer by banks drives respondents' readiness to try new technologies.
- The ease of value delivery determines respondents' choice of adopting a bank product.
- Respondents readily adopt a product technology that suits their lifestyle.
- Respondents are always eager to adopt well designed innovative bank products.
- Respondents' satisfaction with the bank's service quality tends to affect their satisfaction indices.

Conclusions

Information technology products are fast becoming the real thing in the banking industry not only because it reduces queue and accessibility at any time but customization and ease of use. Information technology is increasingly becoming indispensable utility, supporting and driving processes not only in the banking sector but also in other sectors of the Nigerian economy. This has indeed informed the huge financial investment in information technology by banks recently.

In fact, the findings reaffirms the findings of literatures such as Parasuraman (2000), Parasuraman and Colby (2001) and Woherem (2000). Besides, Fishbein and Ajzen (1975) theory of technology acceptance model was also affirmed in the outcome of the findings as it can be implied that the organism which is users' motivations in this case are incentives and other peculiar merits attached to using technology driven products. In the light of the findings of this study, it could be the mass enlightenment carried out as well as the disincentives like high charges on withdrawing from counters placed on individuals and corporate customers by the bank. The response which is the bottom line is the actual system use is the day to day use of technology itself by users and the ease with which it is fraud-proof and available. Applied to this

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study, it is the various media for carrying out ICT driven transaction itself (like PoS, ATM, Credit Card, Online banking, Telephone/Mobile banking etc), its availability, charges by the various operators, susceptibility to fraud, availability of network and all that.

Recommendation

For organizations in the banking industry and customers to benefit immensely from their usage or application of information technology, the following recommendations are proposed based on the outcome of findings:

- Banks should continue to enlighten their customers on latest IT products on the usage.
- Electronic security should not be handled with levity, as it was evident from the survey that most customers are still skeptical about IT driven products for fear of e-theft or e-fraud..
- In recent times, intense competition has arisen amongst the recapitalized banks. This is evident from the quality of IT products been released into the market by banks, the banks studied should therefore invest heavily in IT-driven products so as to always pioneer customized new products that would stand the test of time and also attract customers to adopt this.

Strategic incentives should be adopted by banks to encourage different class of customers as shown in the study which cuts across different demography

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Appendix – Research Questionnaire

Instruction: Please tick [√] as appropriate, the extent to which you agree with the questions below.

	1	2	3	4	5	1	2	3	4	5
	Strongly Disagree	**Disagree**	**Undecided**	**Agree**	**Strongly Agree**					
1	I see electronic banking as a typical component of information technology driven banking.									
2	In my assessment, telephone banking enhances efficient banking services.									
3	The nature of technology based product in a bank appeals well to my continuous patronage.									
4	I am always attracted to customized technology-based bank product.									
5.	Simplified e-banking product means efficient service delivery to me.									
6	I am always well motivated by incentives to use my bank's new technology.									
7	I would prefer banks with very low chances of fraud for my electronic banking transactions.									
8	I prefer a bank with stable and steady network in doing my transaction.									
9	Speed of service delivery is a key determinant of my preference for electronic banking products.									
10	I would prefer a bank with a warm reception and prompt solution to my complaints on ATM cards and the likes.									
11	I prefer a bank with minimal deductions on ATM usage and other IT based products.									
12	I would prefer a bank that prioritizes involvement of customers on product development.									
13	I would prefer a bank whose Information Technology has enhanced the speed of feedback and customer solution provision.									
14	I would prefer a bank that regularly updates me on my account and transaction status.									
15	Quality of service on offer by banks drives my readiness to try new technologies.									
16	My belief and feelings about the quality of a bank's electronic product determines if I would use it or not.									
17	The ease of value delivery determines my choice of adopting a bank product.									
18	I would readily adopt a product technology that suits my lifestyle.									
19	I am always eager to adopt well designed innovative bank products.									
20	My satisfaction with the bank's service quality tends to affect my satisfaction									

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	about.					
21	Please choose any of the following that you think you belong to in these Technology Readiness Indices Explorers (are high in optimism, innovativeness, low in discomfort and insecurity). ☐ Pioneers (are high in optimism, innovativeness, discomfort and insecurity) ☐ Skeptics (are low in optimism, innovativeness, discomfort and insecurity) ☐ Paranoids (are high in optimism, discomfort and insecurity, but low in innovativeness) ☐ Laggards (are low in optimism and innovativeness, but high in discomfort and insecurity) ☐					
Section C: Please rate the following questions as it applies to you.						
22	Which of the following can influence your decision to adopt a bank technology most? Innovativeness ☐ Ease of use ☐ Customised features ☐ Derivable value ☐ Quick Feedback ☐					
23	To what extent would you rate customer involvement in product development in the bank. Great Extent ☐ An Extent ☐ No Extent ☐ I Can't Say ☐					
24	How would you describe how the bank has fared in product development since you have been using the bank?					

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	Highly Improving ☐ Just Improving ☐ Just the same ☐ Not Improving ☐
25	To what extent would you say automation of the bank's activities influenced your continous patronage: Great Extent ☐ An Extent ☐ No Extent ☐ I Can't Say ☐
26	Which of the following would you say posed the greatest challenge to increased technology adoption on regular products like ATM, e-teller etc Persistent Long Queue ☐ Poor Network ☐ Fraud-Prone Technology ☐ Undifferentiated Electronic Product ☐ Late Adoption ☐

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CUSTOMER RELATIONSHIP MANAGEMENT (CRM): AN EFFECTIVE TOOL FOR BUSINESS PERFORMANCE ON MOBILE TELECOMMUNICATION NETWORK (MTN) IN NIGERIA

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Abstract: *Mobile Telecommunication Network (MTN), one of the global cellular providers headquartered in South Africa and owned by corporate investors outside Nigeria. Nigeria, been a readymade market with about 140 millions of people, hence MTN has over 35 million subscribers. The objective of this paper is to assess the Effect of Customer Relationship Management (CRM) on Business Performance on Mobile Telecommunication Network (MTN) in Nigeria. 200 questionnaires were administered and the statistical method applied was chi-square test. The core findings revealed that effectiveness of CRM encourages recurrent patronage; this inspires recurrent patronage for the organisation. Also cordial relationship between the organisation and the customers is established while it enhances the customers' commitment to the organisation's services. Telecommunication industry should as a matter of necessity implement customer relationship management as a strategy to provide the customers with quality services to meet the customers' expectations and to achieve organisational profitability to survive.*

Keynote: CRM, Business Performance, MTN

Introduction:

Customer satisfaction was the in thing in the 80s and the initial customer satisfaction and quality improvement efforts tended towards focusing on tracking customers' survey rating over time as well as linking them to service operations. Over the past few years and in recent times, CRM has substantially enhanced the firm's ability to productively manage a heterogeneous customer portfolio. The

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development of CRM has historical antecedents going back into the pre-industrial era owing to direct interaction between producers of agricultural products and their consumers. Also artisans often developed customised products for each customer that led to retain bonding between the producer and the consumer, Sheth and Parvatiyar, (1995). As customers' beliefs, attitudes and learning process changed, they become more difficult to reach with just mass advertisement hence the accurate target customer segments on a one-to-one basis. The tools of CRM vary widely in form, functions and collectively work to enhance the relationship development process be enabling the coordination of sales service and marketing tasks within an organisation, (Shneider, 2003). It is obvious that marketing remains a relevant discipline with an indispensable role in any organisation in as much as the organisation can be said to have products and customers. Just as marketing enables organisation to ascertain the market for the products and customers, then fine-tune its products to meet the immediate need of the customers at the right time and in the right place, (Kotler and Kelvin, 2006). Pepper and Rogers, (2004) referred to CRM as an inevitable- literally relentless-movement as it represents the way customers want to be served and offers a more effective and efficient way of conducting business. Underpinning the paradigm of CRM is the basic belief that customers' relationships like other important assets in an organisation can be effectively developed and managed by better customising product and service offerings for individual customers, customer retention and increase profits, (Stefanou et. al, 2003). The essence of CRM originates from the 3 concepts in marketing management, that is, customer orientation, relationship marketing and database marketing with advancement of ICT, these 3 marketing tenets combined in the paradigm of CRM, (Langerak and Verhoef, 2003).

THE PROBLEM: The problem is that organisations fail to understand that customers' value, that care and concern are far above the product quality, hence organisation should endeavour to do their best to retain their customers and attract more which will solve the problems of lack of patronage, unfavourable attitude, no repeated purchases, and low profitability level that emanate from not putting in place effective customer relationship management.

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THE PURPOSE: The aim of this paper is to critically examine the effect of CRM on business performance, while the major objectives are: To determine the effect of relationship marketing on customers' loyalty, if the management policy adopted by the organisation encourages relationship marketing, examining of positive relevance of CRM on business performance, also to reveal the challenges faced by organisation due to lack of implementation of CRM and determine if CRM should be implemented in the telecommunication industry.

SIGNIFICANCE: The essence of this paper cannot be over-emphasised in the telecommunication industry. It is pertinent to note that it will be of huge benefits to service organisations as it reveals the relevance of CRM and the various ways relationship marketing can help in enhancing customers' commitment to organisational services or products. This paper will help business managers by directing them on how to create good relationship with potential customers to ensure high demand for their services.

LITERATURE: Presently in the universe of marketing management, multiple definitions of CRM abound, Kotler and Armstrong (2004) defined CRM as "the overall process of building and maintaining profitable customer relationships by delivering superior customer value and satisfaction". Thompson (2008) posits that CRM is an effective tool for achieving positive organisational performance which reflects an increase in profit, goodwill, better product and service delivery. CRM concerns the relationship between the organisation and its customers and asserted that customers are lifeblood of any organisation irrespective of the number of the employees. A CRM analyst has it that CRM is the process of collecting and analysing a firm's information regarding customers' interactions in order to enhance the customers' values to the firm. Firms exploit such information by designing and strategising uniquely targeted to meet customers' needs. This process on the other hand enhances loyalty and increases switching costs as information on consumer preferences afford an enduring competitive advantage. The integration of various data i.e. across purchases, operations, service logs etc, are more complete view of customers' behaviour. The implementation of these developments cut across industries including banking, telephony, internet, manufacturing of products and other service areas with limited attention in the

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marketing literature. Also each industry has unique challenges of its own, (Sunil et. al, 2005). Thompson (2008) asserts that without the existence of customers, business activities will be crippled which indicates that business owners often concentrate on the improvement of their products as one of the basic features of the production concept and ignore their customer care and relationship which will prompt the customers to switch to the organisations that are willing to serve them better.

CONCEPTUAL FRAMEWORK: Obviously, marketing scholars are studying the nature and scope of CRM and are developing conceptualisations regarding the value and process of cooperative and collaborative relationship between buyers and sellers. A lot of scholars with interest in several sub-disciplines of marketing such as distribution channels, services marketing, business-in-business marketing, advertising etc are actively engaged in studying and exploring the conceptual foundations of managing relationships with customers. These scholars are interested in strategies and processes for customer classification and selectivity one-to-one relationship with individual customers, key account management and customer business development processes, frequency marketing, loyalty programs, cross-selling and up-selling opportunities and various forms of partnering with customers including co-brand joint marketing, co-development and other forms of strategic alliances (Parvatiyar and Sheth, 2000). Theoretical and empirical research revealed that higher customer satisfaction leads to higher customer retention rate, increase customer repurchase behaviour and ultimately drives higher firm's profitability (Mittal and Kamakura, 2001). CRM can be tended towards customer lifecycle, including customer acquisition, development and retention strategies. CRM research can be organised along the customer lifecycle, including customer acquisition, development and retention strategies and this acquisition extends from the channels customers used to first access the firm to the promotions that bring them to that firm, (Ansari et al, 2004).

The value of a customer can also be enhanced by the firm through appropriate development strategies such as delivering customised products and cross-selling, hence early detection and prevention of customer attrition can also enhance the total lifetime of the customer base if efforts are focused on retention of valuable customers. Since customer lifecycle implies that each customer has a value over

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the tenure with the firm, and estimating the lifetime of customer requires sophisticated modelling which involves predictions of revenue and retention probabilities, Ansari and Mela, (2003). Customer Lifetime Value (CLV) measure was considered even if several approaches exist, however, scanty evidence exist regarding the accuracy of customer lifetime value predictions, Venkatesa and Kumar, (2004).

The relationship marketing growth escalated by "One-to-One Future" they encourage a One-to-One focus on "share of customer" instead of the mass marketer's "share of market". Based on the marketer's ability, unique message to the customers based on the organisation's knowledge of their interests and that one-to-one interaction with the customers would lead to improved lifetime value. The true secret of a good customer relationship states that "you will be judged by what you do, not what you say", that is, your actions will be judged not only what you claim you are capable of doing, Ward, S (2011).

CRM is the core business strategy that integrates internal processes and functions. It has external networks to create delivery value to targeted customers at a profit and this is based on high-quality customer data and enabled by information and technology, Buttle, (2004).

CUSTOMER RELATION MANAGEMENT AND BUSINESS PREFORMANCE: Research has it that organisations implement CRM to boost their ability to communicate with customers, provide them feedback in a timely manner, examine customer information and customise offerings. (Day, George 2000). The technology components of CRM include front-office applications that support sales, marketing and service, while back-office applications will help integrate and analyse the data, Greenberg (2001), and Jayachandran et. al, (2005). However, the front-office components of CRM facilitate efficient information flow between an organisation and its customers through reciprocal communications and by enabling the routing of information to the appropriate employees in sales, marketing and service. Thus CRM implementation tries to facilitate the smooth dissemination of customer knowledge throughout the organisation to improve the quality of decision making, Ryals, (2005). The back-office parts of CRM include database and data-mining tools that help identify and track customer needs better and faster

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FINDINGS: Effective Customer Relationship Management encourages repeat purchase as established based on series of questions posed on the respondents. Also all outcomes revealed positive relationship that CRM affects business performance positively and it also build customer's loyalty. Evidently, CRM promote cordial relationship between organisation and its customers which lead to increase in turnover.

CONCLUSION: CRM evidently, has contributed immensely to the entire organisational process in the service industry as ensured by increased value to the customers and other concerned stakeholders as well as results in a life time value for the service provider. There is the need to increase relationship when customers in such organisation is reduced, especially if there are commitment and trust from both partners where there is opportunity for win-win situation as well as when switching cost is high. Basically, identifying the major purpose of relationship marketing and improving organisational profitability, implement new marketing strategy will enhance the organisational survival. Also satisfying customers, turning customers into loyal customers and enhancing survival in a competitive environment will aid the organisation to attain greater profit margin.

The underlying principle for CRM is that it improves business performance by enhancing customer satisfaction and driving up customer loyalty. There is a compelling logic to the model which has been dubbed the "satisfaction – profit chain" (Anderson and Mittal, 2000). Satisfaction increases because customer insights allow organisations to understand their customers which create improved customer value propositions. Customers repurchase intention rises with customer satisfaction (Anderson, 2004). This thereby influences the actual purchasing behaviour that has a considerable impact on business performance.

RELEVANT RESEARCH HYPOTHESES

To establishcertain fact, hypotheses were tested to ascertain the effect of customer relationship

management of business performance as a guide in making analysis and assumptions.

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Hypothesis I

H_0: Customer relationship management has no significant effect on MTN business performance.

$H_{1:}$ Customer relationship management has significant effect on MTN business performance.

Table I NPar Tests – Chi-Square Test Frequencies

Customer Relationship Management is the most effective means of promoting and creating lucrative telecommunication performance.

	Observed N	Expected N	Residual
Strongly disagree	21	37.4	-16.4
Disagree	38	37.4	0.6
Undecided	3	37.4	-5.4
Agree	73	37.4	35.6
Strongly agree	23	37.4	-14.4
Total	**187**		

Test Statistics

	Customer Relationship Management is the most effective

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	means of promoting and creating lucrative telecommunication performance
Chi-Square	47.412[a]
Df	4
Asymp. Sig.	0.000

0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 37.4

$X^2 = \frac{\sum(O-E)^2}{E} = 47.41$

Degree of freedom: df = 5 – 1 = 4

Test @ 5% level of significance

X^2 tab = X^2 0.05 = 9.49

At 0.05% level of significance, the table above gives a chi-square value of 47.412 and tabulated value of 9.49 with 4 degree of freedom. Then alternative hypothesis is accepted that CRM has a significance effect on MTN business performance

Hypothsis II

H_0: Effective relationship marketing does not enhance customers' loyalty

H_1: Effective relationship marketing enhances customers' loyalty

Table II NPar Tests – Chi-Square Test Frequencies

Customer Relationship Management builds customer's loyalty

	Observed N	Expected N	Residual

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Strongly disagree	17	37.4	-20.4
Disagree	33	37.4	-4.4
Undecided	17	37.4	-20.4
Agree	103	37.4	65.6
Strongly	17	37.4	-20.4
Total	**187**		

Test Statistics

	The effective relationship marketing enhances customers' loyalty
Chi-Square	148.963[a]
Df	4
Asymp. Sig.	0.000

0cell (.0%) have expected frequencies less than 5. The minimum expected frequency cell frequency is 37.4

$X^2 = \frac{\sum(O-E)^2}{E} = 148.96$

Degree of freedom; df = 5 – 1 = 4

Test @ 5% level of significance

$X^2tab = X^2\ 0.05 = 9.49.$

At 0.05% level of significance, the table above gives a chi-square value of 148.963 and tabulated value

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of 9.49 with 4 degree of freedom. Alternative hypothesis is accepted which stated that Effective Customer Relationship Management enhances Customer Loyalty.

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APPENDIX I

DESCRIPTIVE STATISTICS ON THE RELEVANCE OF CRM ON POSITIVE BUSINESS PERFORMANCE

	Minimum	**Maximum**	**Mean**	**Std. Deviation**
Effective Customer Relationship Management encourages repeat patronage	1	5	3.35	1.309
Customer Relationship Management is the most Effective means of promoting and creating lucrative telecommunication performance	1	5	3.21	1.224
Effective Customer Relationship Management promote profitable customers satisfactions	1	5	3.17	1.287
The role of price and products are key in achieving effective Customer Relationship Management	1	5	3.12	1.178
Effective Service delivery can be achieved without Customer Relationship Management	1	5	3.12	1.208

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Valid N (listwise)				

DESRIPTIVE STATISTICS ON THE EFFECT OF CRM ON CUSTOMERS' LOYALTY

	Minimum	**Maximum**	**Mean**	**Std. Deviation**
Customer Relationship Management build Customers' Loyalty	1	5	3.37	1.150
Customer Relationship Management promotes cordial relationship between organisation and its customers	1	5	3.36	1.190
Customer Relationship Management enhances customers' commitment to the organisational services	1	5	3.30	1.181
Effective application of Customer Relationship Management promotes customers' patronage	1	5	3.23	1.255
Customer does not show interest on the organisational services	1	5	3.22	1.227
Valid N (listwise)				

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DESCRIPTIVE STATISTICS ON THE CRM HELPS TO PROMOTE CORDIAL RELATIONSHIP BETWEEN ORGANISATION AND ITS CUSTOMERS

	Minimum	**Maximum**	**Mean**	**Std. Deviation**
The organisation experience increase in its turnover due to effective Customer Relationship Management	1	5	3.59	1.129
The organisation was able to achieve sustainable competitive advantage as a result of effective Customer Relationship Management	1	5	3.38	1.274
The organisation experience increase in market share resulting from Customer Relationship Management	1	5	3.32	1.184
The organisational sales volumes were increased resulting from good application of Customer Relationship Management	1	5	2.92	1.242
The organisation experiences organisational	1	5	2.27	1.162

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growth				
Valid N (listwise)				

DECRIPTIVE STATISTICS ON THE IMPORTANCE OF EFFECTIVE APPLICATION OF CRM IN BUSINESS GROWTH AND DEVELOPMENT

	Minimum	**Maximum**	**Mean**	**Std. Deviation**
Customers tend to receive service delivery under female leadership	1	5	3.47	1.142
My organisation flourishes more effective during the tenures of female directors	1	5	3.45	1.156
Female directors often tend to stand up to protect the reputations of the organisation during their tenure	1	5	3.45	1.169
Female leaders who are not directors do not care about satisfying customers	1	5	2.45	1.306
The female in the organisation are not motivated to provide quality service delivery to customers due to ulterior motives	1	5	2.44	1.205
Valid N (listwise)				

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DESCRIPTIVE STATISTICS ON CRM SHOULD BE INCLUDED IN TELECOMMUNICATION INDUSTRY

	Minimum	**Maximum**	**Mean**	**Std. Deviation**
Organisational profitability depends on market segment and relationship improvement	1	5	3.71	1.001
Customer Relationship Management strategy on customer-perceived improved organisational profitability	1	5	3.45	1.210
Customer Relationship Management and improves profitability of the organisation	1	5	3.43	1.182
Lowering prices and higher market share affect organisational profitability	1	5	3.41	1.167
Building relationship with customers and stakeholders improve profitability in the long run	1	5	3.17	1.205
Valid N (listwise)				

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APPENDIX II

Kindly indicate by ticking (√) "Strongly Disagree", "Disagree", "Undecided", "Agree", "Strongly Agree" with the statement below

S/N	Statements	SD	D	UD	A	SA
1	Effective Customer Relationship Management encourages repeat patronage					
2	Customer Relationship Management is the most effective means of promoting and creating lucrative telecommunication performance					
3	Effective Customer Relationship Management promotes profitable customer satisfactions					
4	The role of price and products are key in achieving effective Customer Relationship Management					
5	Effective Service delivery can be achieved without Customer Relationship Management					
6	Customer Relationship Management build customer's loyalty					
7	Customer Relationship Management promotes cordial relationship between organisation and its					

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	customers					
8	Customer Relationship Management enhances customers' commitment to the organisational services					
9	Effective application of customer Relationship Management promotes customer's patronage					
10	Customer show interest on the organisational service					
11	Customers are satisfied with the service rendered by the organisation					
12	Prompt attention to customer complaint enhances cordial relationship					
13	The organisation provides after sales service to its customers					
14	The service delivery strategy of the organisation meets customers' demand					
15	Management attitude towards its customers on service delivery is not encouraging					
16	The organisation experience increase in its turnover due to effective Customer Relationship Management					

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17	The organisation was able to achieve sustainable competitive advantage as a result of effective Customer Relationship Management					
18	The organisation experience increase in market share resulting from Customer Relationship Management					
19	The organisational sales volumes were increased resulting from good application of Customer Relationship Management					
20	The organisational experiences organisational growth					
21	Organisational profitability depends on market segment and relationship improvement					
22	Customer Relationship Management strategy on customer-perceived improved organisational profitability					
23	Customer Relationship Management and customer relationship improve profitability of the organisation					

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HUMAN RESOURCES MANAGEMENT: ETHICAL CHALLENGES IN RETAIL BANKING INDUSTRY IN NIGERIA

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Abstract

This paper is carried out to examine the ethical challenges in retail banking in Nigeria which Human Resources Management (HRM) should as a matter of facts consider to be able to have a conducive working environment that will input positively to the success of the organizations. The paper generally reviewed some of the current literatures on ethics and human resources management and finds that setting business ethical objectives will provide important benefits for both the organizations and the employees.

Keywords: Human Resources Management, Ethical Challenges, Banking Industry, Nigeria.

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Introduction

Financial institutions being profit-oriented organisations whose successes can be measured to the extent of the amount of profit earned compared to others in the industry. Nigeria with a population of about 150 million is a large market for potential investors in the Nigerian financial sector. With a large number of people coupled with abundant resources, the country has attracted investors from other lands especially China. In Nigeria, the financial system the hub of productive activity, as it performs the vital roles of financial intermediation and effecting good payments system as well as assisting in monetary policy implementation. It is to ensure its soundness that the financial sector appears to be the most regulated and controlled by the government and its agencies (Ofanson et al, 2010).

In Nigeria, the ability of financial subsector to play its role has been periodically punctured by its vulnerability to systematic distress and macroeconomic volatility and policy fine tuned inevitability. Consequently, the financial reforms were focused on further liberalization of banking business ensuring competition and safety of the role of intermediation and playing a catalytic role in the economic development (Kama 2006).

It is believed that a well repositioned bank is expected to perform its role more efficiently to contribute positively to the development and growth of the economy. Banking sector reforms will lead to improved financial services that lead to cost reduction by the industrial concerns. It is believed that more people will have access to fund from the banking system and this will increase aggregate demand for goods and services. Increased aggregate demand will impact positively on output and employment generation thereby reducing poverty which is the ultimate goal of economic management (Sanusi 2011). Therefore,

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consolidation is just about shrinking of number of banks to enhance synergy, improve efficiency, induce investor focus and trigger productivity and welfare gains (Nnanna, 2004)

As at December 2011 there were 24 deposit money bank with 5,789 branches and 816 microfinance banks bringing the total bank branches to 6,605. The ratio of bank branch to total population is 24, 224 persons, indicating a high level of financial exclusion (Sanusi, 2012). Nowadays, retail customers demand efficiency, transparency and flexibility in their financial transactions, putting pressures on the banking institutions to put in all efforts in order to satisfy the customers' demands. In making these efforts, financial institutions face some hurdles which need to be successfully crossed by good human resources management. The existence of any organization depends on the qualified workers who will then carry out the activities that will enable the organization to achieve its goals.

There are lots of human relations related issues arising from the consolidation programme such as merger or acquisition where banks' staff are affected and become jittery about job security which invariably affected their productivity. Consolidation leads to job losses at all level since there cannot be two directors or chief executives in an organization. Also the variance levels of compensation and severance packages of merging banks in most cases are wide and unrealistic disparity in severance packages of such banks that have merged or acquired. This posed a big problem in cases of merger or acquisition between a big bank and a larger workforce and smaller banks with small strength but high personnel cost (Adeyemi, 2009).

Retail Banking

Retail according to the Oxford Advanced Learner's dictionary (2001) is the sale of goods in the shops to

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customers for their personal use. Thus retail banking generally is meant to satisfy the end users only. This service is for personal use which cannot be transferred to someone else, that is, the owner of the account can fully utilize the services rendered by the bank as a customer to that particular bank. A bank is a financial institution that keeps and lends money and also provides other financial services. Banking has its origin from Germany and some people also traced it to the French word *Banqui* and the Italian word *Banca* (Jhingan, 1984a). Jhingan (1984b) opined that bank is the bench for keeping, lending and exchange of money. Before 1640, there was no such word as banking. The practice of safe keeping and savings flourished in the temple of Babylon by 2000 B.C. Jhingan cited Chanakya in his Arthashastra written in 300 B.C. there lived a powerful guild of merchant bankers who accepted deposits, advanced loans and issues *hundis* (i.e. letter of transfer). There are two bankers who built famous Dilwara Temples of Mount Abu during 1197 and 1247 A.D. as said by the Jain Scripture (Jhingan, 1984c) Then the first bank emerged known as the 'Bank of Venice' which was established in Venice in Italy in 1157 A.D. to finance the monarch in his war (Jhingan, 1984d). The bankers of Lombardy were also popular in England. The first Bank of North America was established in 1781 in Philadephia as a commercial bank. It was chartered by Continental Congress and thereafter, many more banks were chartered in many states of the U.S as posited by Benton and James (2005). However, the modern banking commenced in 1646 with the English goldsmith, while the India Bank emerged as *Bank of Hundustan* in 1770 by Alexander & Co. (Jhingan, 1984e). The first modern bank was established in the Bengal Presidency as the bank of Bengal in 1806. The English goldsmiths took special precautions against theft of gold and jewelries. He seemed to be an honest person because the merchants in the

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neighborhood started entrusting their billions of money and ornaments in his care. With time, the goldsmith started charging for the caretaking and receipts were issued as evidence. The transaction of exchange of gold for money and the goldsmith's receipts became like cheque as a medium of exchange and a means of payment (Jhingan, 1984f). The Chamber's Twentieth Century Dictionary defined a bank as an "institution for the keeping, lending and exchange of money." Crowther (1940) opined that "the banker's business is to take the debts of other people to offer his own in exchange and thereby create money." Kent (2011) defined a bank as "an organisation whose principal operations are concerned with the accumulation of the temporarily idle money of the general public for the purpose of advancing to others for expenditure." Sayer (1978) posited that "ordinary banking business consists of changing cash for bank deposits and bank deposit for cash; transferring bank deposits from one person or corporation (one depositor) to another; giving bank deposits in exchange for bills of exchange, government bonds, the secured or unsecured promises of businessmen to repay etc." Thus, banking is concerned with the way business of bank is carried out. Banking is therefore, the activities undertaken by banks which include personal banking (non-business customers), commercial banking, corporate banking etc.

For the purpose of this study, retail banking is an aspect in banking institutions meant to transact directly with customers. And so was the Nigeria bank which was established in 1984 which was largely unregulated and thus, lots of instability and bank failures characterized the system. Government took control of the regulation of the industry incorporating stability into it till 1980s when deregulation of economy that accompanied the Structural Adjustment Program (SAP). Then the country embarked upon by bringing the sector back into public focus. For over 25years this sector has undergone considerable

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reforms (Tella, 2009)

Human Resources Management (HRM) HRM is an acronym of Human Resources Management. This is strategic, logical and well organised method of handling an organisation's most valued assets, i.e. people who are working individually and collectively to contribute to the achievement of the objective of the organisation or business. HRM is to employ people, develop their capacities, make use, maintain and compensate their services in relation to the job and organisational requirement. HRM is the management of people to achieve individual behavior and performance that will enhance an organisation's effectiveness. HRM encourages individuals to shape their behaviour in accordance with the organisational objectives that employs them. (Price, 2000).

The effective management and development of people is now seen as critical to gaining improvements in organizational performance. This is potentially good news for those involved in human resource management because it means that there is greater interest in subject than ever before. As appealing as this evidence is, however, serious doubts remain about whether or not managements really do invest in employees in practice, and if this leads to competitive advantage. A number of studies show that it is the lack of professionalism in recruitment, a paucity of effective training, a failure to communicate with the workforce and an unsystematic approach to employees relation that still predominate (Marchington and Wilkinson, 1996).

The practitioners of HRM perceive it as a best and new approach of a work place management than the conventional view. Its special skill forces the management of an enterprise to express their goals with accuracy so that they can be understood, and they embraced by the workforce with resources needed and

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provided for them to successfully accomplish their assignments. If HRM techniques are carefully and properly implemented, they will express the goals and operating practices of the enterprise overall.

Beer et al (1984) defined HRM as a "strategic approach to management of HR that involves all management decisions and actions that affect the relationship between organisation and employees." It is also defined as a "distinctives approach to employment management that seeks to achieve competitive advantage through the strategic development of a highly committed and capable workforce using an integrated array of cultural, structural and personnel technique" (Storey, 2001a). Storey (2001b), also opined that HRM is an elusive concept with many meanings and is elastic in nature because it encompasses wide range of application from books, society and organisations.

Thus, HRM is the activity within an organisation that is coherent and binding the people to the management of an organisation on the behavioral aspect of management of that organisation and providing livelihood for the workers working in it. HRM is usually performed by line managers. It is the main activity which handles issues related to people such as compensation, hiring, benefits, wellness, performance, management organisation development, human capital development, communication, training, safety, employees' motivation and administration.

Since there are many banks in the society rendering all sorts of banking services to the populace, there is keen competition among them to be able to get a large share of the market to be able to make profit for them. By so doing, the HRM is confronted with such challenges as to how to select the right kind of people that can deliver in order to realise the organization's objectives.

The challenges of HRM in retail banking in Nigeria are enormous and very fierce, in the sense that, many

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of the institutions are relying on the limited number of persons that form the human capital of the organisation to get the job done. They make huge profits even at the detriment of the few employees even if the population of the country is big enough for the bank to employ more employees to appropriately match the number of customers and job roles. That is, the institutions are exploiting the employees with workloads above acceptable human endurance, thereby causing stress and giving ridiculous targets for the employees to meet, especially the female staff. The internal challenges are the problems of capable human capital. That is, for those appointed, how hard working and efficient are they when working under pressure? Are they competent enough for the task on ground? The banks have reduced their staff to a level where a person is doing the job of 3 or more people, thereby affecting the quality of services rendered and staff no longer accords the customers their due respects. The fact that customer care services have dropped drastically because of the staff strengths as exhibited by interrupted service delivery is an internal challenge. While on the other hand, external challenges are more difficult to handle because of the fear of strange bedfellows and ability to discern the best candidates to appoint for the vacant positions at any given time. The existing strategic model of HRM in most banks have ethical challenges with some flaws like ignoring the employees' interests, not taking cognizance of the legal requirements, social norms and values of the environment in which they operate. (Fajana et al, 2011).

Creating an Ethical Organization

Ethic is defined as systems of right and wrong (Dess et al, 2005a). Hence ethics help people to streamline when an act is moral or immoral and socially acceptable or not. The way of life of Nigerians include religious beliefs, national and ethnic heritage, home practices, community standards and expectations,

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educational experiences, relationship with friends and neighbours. Therefore, business ethics could be seen as the application of ethical standards to commercial enterprise. Dess et al (2005b) opined that "many leaders may think of ethics as a question of personal scruples, a confidential matter between employees and their consciences. Such leaders are quick to describe any wrong-doing as an isolated incident, the work of a rogue employee. They assume the company should not bear any responsibility for an individual's misdeed – it may not even enter their minds. After all, in their view, ethics has nothing to do with leadership."

The truth is that, in this part of the world, ethics is the pivot that rotates the culture of the people. Ethics is the bedrock of Nigerians' way of life, and they would frown at unethical conducts by anyone.

Individual Ethic versus Organisational Ethics

Ethical conduct is the core of all businesses, ethics is at the core of decision-making and such organizations must imbibe ethics to address situations of uncertainty and change Brink (1999). "To consider some of the longer-term institutional changes faced by individuals and organisations alike is to appreciate some of the barriers and limits that might affect the health and well being of individuals and indeed the organisations" (Sparrow and Cooper, 2003). In Nigeria social-cultural diversity has a strong influence in organisational practices. The character flaw of a lone ranger does not explain the total corporate misconduct and so unethical business practices usually include the tacit or explicit, cooperation of others that reflect the values, attitudes and behavioural patterns that describe the organisation's operating culture.

According to Jennings (2006a) "ethical standards are not standards of law but a higher standard which is

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also known as normative standards in Philosophy. Ethical standards are generally accepted rules of conduct governing the society." He further stated that ethical rules are both standards and expectations behaviour as accepted in the society. Ethics are unwritten rules. Ethical standard could be seen as ethics in the preambles. Ethical code on the other hand needs to shed light and insight into dilemma resolutions either unique or situational outside to address individuals (Brink, 1999).

Obviously, ethics is as much an organisational as a personal issue, since anything ethics is not clandestine, ethics orientation leaders should be generally considered to be a key factor in promoting ethical character among the employees. They have to take personal ethical responsibility as actions in decision making and when they exhibit ethical standards then they turn to be role models for others in the organisation and increase the level of ethical behaviour.

The regulatory standard probably is insufficient to remain competitive in a world that has turned more socially conscious. Lack of ethical culture could lead to ethical crises and if it does, could also be very expensive in terms of financial costs, in the erosion of human capital and the overall firm reputation. The ethical organisation has its benefits indirectly and that positive relationship has generally been found between ethical performance and strong organisational culture, increased employee efforts, increase turnover, higher organisational commitment and enhanced social responsibility. The merits are strong ethical orientation that can have a positive effect on employees' commitment and motivation to excel because human capital is critical in creating values and competitive advantages.

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Conclusion

It is necessary to curb the unethical practices which cut across other issues of organisational behaviour such as protecting the environment and fair employment practices. The developing countries are trying to curb unethical decadences in all ramifications. Hinging on cultural value of the people will enable the HRM to understand the ethical value of the environment Hofstede (1991). The organisations should embark on the goals and objectives for best strategies to benefit the business the HRM should employ those who are competent and willing to contribute in the sustenance of the business. Torrington and Hall (1987) asserted that employees and the employers should both stick to the agreements and ensure that the agreement is fulfilled. Violating rules, permitting organizational abuse, condoning unethical actions, balancing ethical dilemma and rationalizing dilemmas are ethical misbehaviours on both individuals and organizations. Many countries have adopted and some are currently considering laws that would establish some parameters for ethical and legally compliant corporate conduct. Some of these legal laws should cover both the private and public sectors Dubinsky and Richter (2009) The Nigerian government should as a matter of urgency implement parameters for ethical and legally compliant corporate conducts and collaborate with recruiting agencies to implement ethnics in the organisations. Peter Drucker as cited by Jennings (2006b) "encourages us to make decisions that do not harm others".

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Customers Loyalty: Concept & Definition (A Review)

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Abstract

Generally speaking, customer loyalty means the intention of repurchasing products and services, and this is the goal of industry or loyalty is a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, thereby causing repetitive same-brand or same -brand set purchasing. So customer loyalty is seen as one of the key factors of a company's success. Several researchers have pointed out that it costs more than five to six times as much to obtain a new customer than to keep an existing one and an improvement of 5 percent in customer retention leads to an increase of 25 percent to 125 percent in profit. This study is focused on defining the customer loyalty and explaining its concept.

Introduction

Loyalty is a phenomenon that received a great deal of interest among marketers, (Reddy et al 2011) though recent years have shown a growing interest in customer loyalty Kuusik (2007) even during the 1980s customer loyalty was on most marketers' minds and numerous companies spent millions on customer relationship management programs with the goal of building customer loyalty (Pitta et al 2006). Over the past few years, loyalty has become important because of increased competition within respective industries. Companies infer "loyalty" to have a similar meaning and have developed strategic marketing and advertising efforts around creating a connection between the company and its customers (Liang 2008). Generally speaking, customer loyalty means the intention of repurchasing products and services, and this is the goal of industry (Pi, & Huang 2011).

BOSE and RAO (2011) found that in the business context, loyalty is the customer's commitment to do business with a particular organization which effects in repeat purchases of goods and services of that organization. It also results in recommending the goods and services to friends and associates. Similarly Musriha (2012) also asserted that customer loyalty is the commitment held by customers to repurchase or subscribe to a product or service in the future. Krumay & Brandtweiner (2010) expressed that customer loyalty is seen as one of the key factors of a company's success and a necessary premise among others to gain customer loyalty is how the customers perceive the customer service.

According to Kuusik (2007) the globalization of competition, saturation of markets, and

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development of information technology have enhanced customer awareness and created a situation where long-term success is no longer achieved through optimized product price and qualities. Instead, companies build their success on a long-term customer relationship.

According to Pitta et al (2006) the concept of customer loyalty is not something that consumers recognize. For most companies the customer or brand loyalty issue is, in behavioral terms, nothing more than repeat purchasing. In fact, many company efforts aim solely at increasing the percentage of repeat purchases among current customers. Supporting this effort, marketing strategists have developed predictive models that show the important profitability effects of increasing the repeat purchase rate among existing customers.

Li & Green (n.d) and Chen & Ching (2007) visiting literature extracted that loyalty is a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior. So thereby causing repetitive same-brand or same -brand set purchasing. The customer's attitude toward a service or product (brand) including attitudinal preference and commitment has a greater impact on forming loyalty. Quality is a necessary element in defining loyalty. Furthermore, service quality, perceived value and customer satisfaction are associated with loyalty.

Li & Green (n.d) stated that loyalty strategies are created by having the suitable marketing mix – product, price, place, promotions and a value proposition to support the target segments and to have the appropriate positioning in the minds of the targeted consumers in comparison to competitors.

Concept of Customers Loyalty

Customer loyalty has been the popular topic among the business workplaces (Leong et al 2012) and recent years have shown a growing interest in customer loyalty (Kuusik 2007) so has been widely researched in the domain of marketing (BOSE and RAO 2011). Loyalty is a positive belief in the value that a company provides, leading to increased purchases over time. "Loyalty is a positive belief, generated over the course of multiple interactions, in the value that a company and its products or services provide, which leads to continued interactions and purchases over time" (Oracle Corporation, 2005). However, in the business world, there are still considerable differences of opinion about the specific elements of loyalty (Thompson, 2007).

Uncles et al (2002) asserted that at a very general level, loyalty is something that consumers may exhibit to brands, services, stores, product categories (e.g., cigarettes), and activities (e.g., swimming). Customer loyalty as opposed to brand loyalty is to emphasize that loyalty is a feature of people, rather than something inherent in brands. Unfortunately there is no universally agreed definition. Instead, there are three popular conceptualizations: loyalty as primarily an attitude that sometimes leads to a

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relationship with the brand, loyalty mainly expressed in terms of revealed behavior (i.e., the pattern of past purchases) and buying moderated by the individual's characteristics, circumstances, and the purchase situation.

Szűts & Tóth (2008) expressed that 'customer loyalty' is a customer's demonstration of faithful adherence to an institution or merchant despite the occasional error or indifferent service. In this view, customer loyalty is an attitude or behavior that customers explicitly vocalize or exhibit.

Basarir & Dhaheri (2009) asserted (referring Stone et al., 2000) that the term customer loyalty "is a physical and emotional commitment given by customers in exchange for their needs being meet". It is related to the behavior of the customers who visit the supermarkets repeatedly. It is very important to keep a customer happy to have more business. In order to keep the customer for more businesses the customer satisfaction needs to be warranted by the market. The customer satisfaction can be thought as a key element of the strategies that supermarkets can gain loyalty with. However Oracle Corporation (2005) argued that loyalty should not be confused with customer satisfaction. Although loyalty is built on satisfaction, organizations can have satisfaction without loyalty.

Marshall (2010) also asserted (quoting many studies) that loyalty refers to a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, thereby causing same-brand or same organization purchasing, despite influences and marketing efforts having the potential to cause switching.

Bagdonienė & Jakštaitė (2007) citing several studies revealed that customer loyalty is the highest valuable result of marketing efforts, thus the development of customer loyalty has become an important focus on marketing strategy. The customer loyalty is winning the confidence of the customer in favor of an organization so that the relationship becomes a win-win situation for both the organization as well as the customer. Researchers affirmed the benefits of customer loyalty to provider inclusive lower customer price sensitivity, reduced expenditure on attracting new customers and improved organization's profitability and noted that loyal customers pass on favorable word-of-mouth comments about a company or product. The customer loyalty is termed as customer commitment to do business with particular organization, purchasing their goods and services repeatedly and recommending the products and services to friends, acquaintances and associates. Loyalty is more than just repeat purchase. Someone who keeps buying may be doing so out of inertia, indifference or exit barriers rather than loyalty. Customer loyalty has evidence not only as behavior but also as attitude. The latter as a certain belief and feeling stimulates to react in a certain way towards things, people and events, determines attachment to goods, service or organization. A richer understanding of the attitudinal component of loyalty is crucial, as it is shown linked to future usage, enhanced word-of-mouth recommendations, and ultimately to customer profitability. Loyalty based on the attitude is less faithful than loyal behavior; moreover both attitude and behavior are changing over time. In other words loyalty is not a static state. Customer loyalty has

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emotional and rational background. Feelings, expectations, relations with staff of the organization, determine the emotional loyalty, whereas rational loyalty is determined by thinking, availability of information and its understanding, cognition of organization activities' processes. Some researchers created a framework of four different categories of loyalty, based on the factor of behavior and attitude: true loyalty, spurious loyalty, latent loyalty and no loyalty, and six types of loyalty: monopoly loyalty, inertia loyalty, convenience loyalty, price loyalty, incentivised loyalty and emotional loyalty. Customers can be loyal forcibly when they have not another choice (*prisoners*), can be loyal in several cases (*detached loyalists*), can be venally loyal (*purchased loyalists*), can be loyal from satisfaction (*satisfied loyalists*) and can be loyal implicitly (*apostles*).

McCain et al (2005) extracting from several studies asserted that customer loyalty is generated through a belief (service quality), affect (satisfaction), and cognitive (customer loyalty) process. Studies reported that the development of consumer loyalty follow the cognitive–affective–conation–action pattern. During this process, a consumer can become loyal at each of these four phases. The first phase is cognitive loyalty. In this stage, consumers recognize that one brand is better than other alternatives and form preferences based upon their evaluations of service quality. The second phase is affective loyalty, in which the liking of the product and a positive attitude toward the brand are developed based upon continuous experiences of product satisfaction. In the third loyalty phase, conation loyalty, a brand-specific commitment to repurchase is generated and the intention to return is formed. Finally, the return intention is ''transformed into readiness to act'' at the action loyalty phase (Oliver, 1999, p. 36). In the loyalty development process, it is vital to note the importance of the cognitive loyalty as the starting point that leads to subsequent loyalties.

Szczepańska & Gawron (2011) are of the opinion that customer loyalty can be defined as a constant and positive attitude towards an object (i.e. brand or business enterprise). They revealed that customer loyalty (previously associated with the field of marketing studies) is becoming a link between management and marketing. The quantifiable loyalty factors (i.e. customer portfolio profitability) determine the ways in which desired values are devised and presented to the customers. Marketing definition of loyalty traditionally covered two aspects of the phenomenon: behavioral aspect and attitudinal aspect.

KOÇOĞLU (2012) is of the view that customer loyalty is defined with consideration paid to the amount of buying for a given trademark

Suprihanti (2011) expressed that loyalty is an indication that the consumer that always become the customer, that always have the strength and positive perception to the company. Every customer has different basics to the loyalty. It depends on their objectivity. The loyalty of customer is showed, by giving recommendation to other costumers and keeping the consumption of the product continuously. Explaining customer loyalty Suprihanti (2011) further stated that generally, the customer loyalty means

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that the loyalty of someone to the product, both thing and the services. The loyalty of customer is a manifest and the follow up of customer satisfaction after using the facilities and using the services that is given by the company, also to keep becoming the company's customer.

BOSE and RAO (2011) reported that according to findings of researchers a satisfied customer tends to be loyal. That customer remains loyal to an organization as long as that organization gives better services or products as compared to another organization. BOSE and RAO (2011) referring McIlroy & Barnett, 2000 and Morris et al., 1999 narrated that in the business context, loyalty is the customer's commitment to do business with a particular organization which effects in repeat purchases of goods and services of that organization. It also results in recommending the goods and services to friends and associates. The key to the successful adoption of relationship marketing lies in the building of client loyalty in dynamic business environments. Pi & Huang (2011) also stated that customer loyalty means the intention of repurchasing products and services, and this is the goal of industry.

BOSE and RAO (2011) quoted the words of Shoemaker and Lewis (1999) *"loyalty occurs when the customer feels so strongly that you can best meet his or her relevant needs that your competition is virtually excluded from the consideration set and the customer buys almost exclusively from you - referring to you as 'their restaurant' or 'their hotel'.*"

Taleghani et al (2011) extracting from literature (Shammout, 2007 and Bigneacaniz et al, 2008) opined that the customer is the only profitable resource of companies in present and future, but, anyway, a good customer who makes more profit is always possible to get lost, because, the competition to achieve a good customers is so high. Nowadays, increase in multilateral information of customers regarding market and access to information has caused less loyalty of customers to the companies. So, today the visitors are looking for ways and information through which they would make faithful customers for themselves, because it causes decrement in marketing and operational expenses and increase in profits, that the organization and companies are determined to make firm connections with their customers by taking advantages from marketing strategies. Juncture marketing with its ability in making the customers faithful through better understanding of their needs and offering of services according to needs and establishment of long-term connections can be lead to decrease in expenses. Customers with long-term loyalty rarely tend to other companies, while customers with short-term loyalty easily end their connection and if find better products will go for them.

Cheng, et al. (2011) extracting from several studies pointed out that customer loyalty refers to a customer's possible repurchase behavior, and willingness to become a member of the service institution. Customer loyalty is the performance of a consumer still choosing the same product or service after comparing it with other competitor's products with the premise that the competitive product can be easily purchased, and it will go through the four stages of perceived loyalty, emotional loyalty, intentional loyalty and action loyalty.

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CENGİZ et al (2007) asserted that loyalty could be described as repetitive buying behavior caused by positive attitudes or as a coherent buying behavior arising from the psychological judgment making and appraisal continuum. Loyalty is not created by a specific service encounter of a consumer but created by a consumer's accumulative experience and service with the service throughout time.

John (2011) revealed that customer loyalty is the feelings or attitudes that incline a customer either to return to a company, shop or outlet to purchase there again, or else to re-purchase a particular product, service or brand. Customer loyalty is the totality of feelings or attitudes that would incline a customer to consider the repurchase of a particular product, service or brand or re-visit a particular company or shop. It affects the success and profitability of companies. Companies can achieve competitive advantage through customer loyalty and it is the way to gain the best kind of customers and thereby repeat customers.

Lin, (2012) concluded that prior literature (Cunningham, 1956; Jacoby & Chestnut, 1978 and Dick and Basu, 1994) on customer loyalty has focused mainly on the loyalty to a given brand, especially emphasizing on the evaluation of actual repeat purchasing behaviors. Subsequently, psychological meaning is also considered; and consumer beliefs, affect, and intention are assessed in an attitude-based framework. Therefore, composite measures of behavioral and attitudinal loyalty are encouraged and have become the essence of loyalty. In addition, previous studies (Macintosh & Lockshin, 1997; Palmatier et al., 2007; Reynolds & Beatty, 1999) presented that customer loyalty includes two different constructs: loyalty to the salesperson and loyalty to the firm. Customers usually have intense and frequent interactions with their salesperson, and thus they establish a close relationship with the salesperson instead of the service firm. Therefore, it should be clarified whether customers render their loyalty to the service employees (salespeople) or to the service firm. Even though the salesperson is the main contact point between customers and the service firm, customer loyalty to the salesperson is different from loyalty to the service firm.

Li & Green (n.d) referred perspective proposal of Oliver's (1997) that loyal customers go through four stages. First is a cognitive sense (belief). For example, sales promotion or high quality products of a firm for first time purchase consideration attracts a customer. To be loyal, the customer must consistently confirm that his or her expectations about the goods or services are met. Second is the affective sense (favored attitude) in which consumers are repeatedly satisfied from purchasing decisions. Third is the conative stage that consumers have a behavioral intention – committed deeply to buy. The intention leads to the fourth stage of action. Customers have the desire to overcome obstacles, e.g., attraction of competitors or price increase by a firm, to achieve the actual purchase behavior.

Kabir, & Rafe (2012) asserted that for conceptualizing the term customer loyalty, it has typically been divided into two typologies–behavior and attitude. The behavioral aspect of customer

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loyalty represents- actual repeat purchase of products or services that includes purchasing more and different products or services from the same company, recommending the company to others, and reflecting a long-term choice probability for the brand. The customers' attitudinal component represents notions like: repurchase intention or purchasing additional products or services from the same company, willingness of recommending the company to others, demonstration of such commitment to the company by exhibiting a resistance to switching to another competitor and willingness to pay a price premium.

Antonios (2011) argued that in general terms, customer loyalty is a complex subject to study since it comprises of many dimensions and its conceptualization has been dominated by the behavioral and attitudinal approaches. On the one hand behavioral characterizations are in simple terms based on aspects of recurrent purchase behavior in the manor of studying the amount of purchase, frequency of purchase and amount of brand switching which have been offered. On the other hand is the attitudinal approach which comprises of consumer attitudes, preferences and dispositions towards brands, and which, in turn allow for greater insight into loyal behavior.

Pi & Huang (2011) also mentioned from some reference that customer loyalty could be exhibited through attitudes and behavior. The attitudes include the intention to repurchase or purchase other products from the company, the intention to recommend and the immunity to competitors. The behavior includes the behavior of repurchase, purchasing other products from the company, and recommending it to others.

Shih-I (2011) concluded that customer loyalty is a customer's sense of identification with a business. Shih-I (2011) elaborating the concept also described two alternate forms of loyalty: behavioral loyalty and attitudinal loyalty. Loyalty is also manifested in two other ways: repeat patronage and recommendation. Repurchase intention and advocacy are used to evaluate consumer brand loyalty to a single retailer; advocacy" here is understood to signify positive word-of-mouth, meaning that customers will recommend a retailer to others. Shih-I (2011) argued that researcher focus loyalty on attitudinal loyalty and behavioral loyalty. Behavioral loyalty (a substantial element) means consumers' repurchase behavioral or intension of specific brand. Attitudinal loyalty (a psychological construct) means consumers' sense of specific products or service.

Empen et al (2011) expressed that brand loyalty describes consumers' attitude or behavior that directly effects the consumption decision and thereby determines retailers' optimal pricing strategies. In most models brand loyal behavior is either defined by the maximum price differential consumers are willing to accept before they switch to price reduced brands (degree of loyalty) and/or by the size of the loyal consumer segments (extent of loyalty). Brands might differ with respect to the level of loyalty and/or the size of their loyal consumer segment. A strong brand has either customers who accept a high price differential before they switch to another brand or a large brand has many loyal customers (large loyal segment).

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Shih-I (2011) and Jumaev et al. (2012) quoted that Ganesh et al. (2000) empirically derive two distinct dimensions of the loyalty construct: active and passive loyalty. Active loyalty behaviors are those that require a conscious and deliberate effort to undertake, and are reflected in both purchase behavior and purchase intentions. Passive loyalty can be identified when customer purchase behaviors or intentions are affected by a change in price or switching cost.

Titko & Lace (2010) have described a chain of effects from employees to profit. The links in the chain are as follows: Profit and growth are stimulated primarily by customer loyalty. Loyalty is a direct result of customer satisfaction. Satisfaction is largely influenced by the value of services provided to customers and satisfied, loyal, and productive employees create the value.

DURUKAN et al (2012) are of the opinion that using income that earned in difficult conditions, for purchasing certain products or by purchasing certain company is called as customer loyalty.

According to Pi, & Huang (2011) measurement of customer loyalty has three categories: Intent to repurchase, primary behavior (transaction information) and secondary behavior (the willingness to recommend products and services in public, and give praise).

According to Palmatier (2007) loyalty to the selling firm is the customer's "intention to perform a diverse set of behaviors that signal a motivation to maintain a relationship with the focal firm". The customer's intention to continue to conduct business with the selling firm may be based on the customer's interactions with the salesperson and other employees, the comparative advantage of the firm's product/service offering, and/or other loyalty generating activities associated with the selling firm. A significant portion of customer loyalty to the firm is based on elements embodied in, associated with and controlled by the salesperson and that the customer–selling firm relationship can be undermined if a key contact employee no longer deals with the customer.

Li & Green (n.d) cited that Oliver's (1997) perspective proposed that loyal customers go through four stages. First is a cognitive sense (belief). For example, sales promotion or high quality products of a firm for first time purchase consideration attracts a customer. To be loyal, the customer must consistently confirm that his or her expectations about the goods or services are met. Second is the affective sense (favored attitude) in which consumers are repeatedly satisfied from purchasing decisions. Third is the conative stage that consumers have a behavioral intention – committed deeply to buy. The intention leads to the fourth stage of action. Customers have the desire to overcome obstacles, e.g., attraction of competitors or price increase by a firm, to achieve the actual purchase behavior. With loyal customers, companies can maximize their profits. Loyal customers are willing to (1) purchase more frequently (price insensitivity), (2) try the firm's new products or services (repurchase intention), (3) recommend products and services to others (word-of-mouth), and (4) give companies suggestions (complaint behavior)

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(Reichheld & Sasser, 1990). Furthermore, Zeithaml, Berry, and Parasuraman (1996) propose a comprehensive multi-dimensional framework to measure customer loyalty. In their research, loyal consumers have (1) high purchase intention (repurchase intention), (2) less price sensitivity (price insensitivity), (3) feedback to the firm (word-of-mouth, complaint behavior), and (4) do more business (frequent purchase and no switching behavior).

Ayyildiz & Cengiz (2007) quoted from the literature that loyalty has been defined as repeat purchase behavior led by favorable attitudes or as a consistent purchase behavior resulting from the psychological decision-making and evaluative process. Customer loyalty is generated through a belief (service quality), affect (satisfaction), and cognitive (customer loyalty) process. The development of consumer loyalty follows the cognitive-affective-conation-action pattern. During this process, a consumer can become loyal at each of these four phases. The first phase is cognitive loyalty. At this stage, consumers recognize that one brand is better than other alternatives and form preferences based upon their evaluations of service quality. The second phase is affective loyalty, in which the liking of the product and a positive attitude toward the brand are developed based upon continuous experiences of product satisfaction. In the third loyalty phase, conation loyalty, a brand-specific commitment to repurchase is generated and the intention to return is formed. Finally, the return intention is "transformed into readiness to act" at the action loyalty phase. Loyalty must be achieved through customer satisfaction, based on the perceived performance of the service product; hence service quality and customer satisfaction are two prerequisites of loyalty.

Marshall (2010) revealed (citing several studies) that much of the original work on loyalty defined it in behavioral terms (repurchase or purchase frequency) and then later admitted an attitudinal component. Behavioral loyalty reflects customer actions and involves the measurement of past purchases of the same brand or and/or the measurement of probabilities of future purchase given past purchase behaviors. Attitudinal loyalty, on the other hand, is the consumers' psychological disposition toward the same brand or brand-set and involves the measurement of consumer attitudes. Both behavioral and attitudinal loyalty are important concepts in understanding long-term customer relationships, especially when it is important to predict future patronage by the customer. One can certainly be a loyal customer yet be an infrequent shopper, so frequency of consumption must not be confused with loyalty. Marshall (2010) also suggested that true loyalty is, in some sense, irrational. Competitors can (and do) take advantage of this position, engaging consumers through persuasive messages and incentives with the purpose of attempting to lure them away from the preferred offering. These enticements are the obstacles that brand and or service loyalists must overcome.

Ivanauskiene & Auruskevicien (2009) citing some studies asserted that loyalty is also interpreted as an expectation to continue a relationship with a particular brand. Generally loyalty has been explained as (1) an active loyalty when a consumer re-use the brand and recommend the brand to others, and (2) a passive loyalty, that is characterized as a not switching even when brand provides less positive conditions.

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Researchers argue that loyalty is a permanent interaction process between the brand and the user rather than the outcome. Loyalty can be described as (1) a loyalty, based on inertia, when the user purchases a brand again because he/she used to do it, however if the conditions allow the user will replace the product with the competitors brand; and (2) a true brand loyalty when the decision to repeat purchase is made on satisfactory experience and positive attitude toward the preferred brand. Mostly researchers distinguish between two types of loyalty - behavioral loyalty and attitudinal loyalty. Attitudinal loyalty is loyalty as an attitude that causes a gradual long-term relationship with the brand. Attitudinal commitment (or strong positive attitude) is a mandatory condition to build true loyalty toward the brand. Behavioural loyalty model, explained by taking references on a series of past purchases and only after the consumer motivation and commitment toward a particular brand where analyzed. Studies have shown that the vast majority of consumers are "polygamous" - loyal to the line of brand-names in category, and only a limited number of users can be attributed to the "monogamous" (completely loyal to a single brand) or ”promiscuous“ - disloyal to any trade mark. Behavioral loyalty model can be described as a loyalty formed after a number of product purchases when consumer was likely satisfied with the brand attributes and found out that all brands in category are more or less similar. Both loyalty models - behavioral and attitudinal loyalty - are “highly intertwined”. The third popular profile of loyalty is when the purchase is influenced by individual’s characteristics, the environment and the purchase situations and even a positive attitude and strong brand commitment don’t matter when the product purchase is confronted with certain co-determined factors. Researchers divided the antecedents of loyalty into four main groups:

(1) Characteristics of the environments
(2) Characteristics of relationship
(3) Characteristics of the consumer
(4) Consumer perception of the company.

Some researchers also singled out three aspects of user loyalty that are essential to the development of the long-term relationship between the consumer and brand. These are: 1- Calculative commitment,
2- Affective commitment and
3- Brand satisfaction

Ivanauskiene & Auruskevicien (2009) quoted that some researchers proposed categorization of customer loyalty types by segmenting loyal ones into four categories – Captive, Convenient seeker, Contented and Committed – and gave brief description of typical behaviors and attitudes associated with each category.

Ivanauskiene & Auruskevicien (2009) referred some studies and stated, that there is no one commonly accepted description of loyalty and even now still many debates take place on what customer loyalty is and what the key drivers that cause loyalty are. The complexity of loyalty concept leads to persistent debates and differences in interpretation of the concept, even more, researchers stressed the need to examine the concept of loyalty together with the effectiveness of loyalty programs and Customers Relationship Management elements as instruments to build loyalty.

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Durukan & Bozaci (2011) asserted that under today's competitive and difficult business environment, loyal customers are vital for success and continuity of companies. At this point creating customer satisfaction is seen as a prior condition to ensure customer loyalty. There are generally three types of customer in terms of customer loyalty. The first category involves customers who are not loyal. The second category consists of individuals who forced to be loyal because of some factors like switching costs. On the other hand the third category consist of sincere loyal customers who have not a thought of changing firm, carry positive feelings and thoughts toward company, voluntarily choose the firm and represents positive word of mouth behavior.

Marshall (2010) referred Oliver (1997) and reported that consumer loyalty is considered an important key to organizational success and profit. Loyalty has been defined as "a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, thereby causing repetitive same-brand or same-brand set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior". Most analyses of loyalty have been from a behavioral perspective, excluding attitudinal type data and concentrating on a deterministic perspective. Loyalty is much more than just repeat purchases as oftentimes repeat purchase may be the result of inertia, indifference or exit barriers.

Jandaghi et al (2011-a) concluded that in fact, customer's commitment is the outcome of an organization, which creates advantages for customers so that they keep on increasing their purchase from the same organization. Real customer's commitment is established when he/she is motivate to purchase without any encouragement. This relationship is established if parties feel that there are special advantages for them and they can attract each other like two poles. Loyal customer does not only focus on prices but also he/she acts like a fan of organization and, as a result, helps to attract new customers. Likewise, the cost to acquire a new customer is 15 times of retaining an existing customer and by %5 increases in customers' loyalty; the profit also increases 25 – 85 percent.

Dhandabani (2010) in their research about banks wrote that customer loyalty is a feeling of commitment on the part of the consumer to a product, brand, marketer, or services above and beyond that for the competitors in the market place, which results in repeat purchase. A loyal customer to a bank is thus, one who will stay with the same service provider, is likely to take out new products with the bank and is likely to recommend the bank services. They further wrote that behavioral intention could be captured by such measures as repurchase intentions, words of mouth, loyalty, complaining behavior, and price sensitivity. Loyalty is predominantly satisfaction driven and therefore customers' satisfaction measurements are believed to give a better indication of future performance of service firms than, for instance financial and accounting based measures.

Gyulavári (2010) revealed that customer loyalty originally referred to repeated purchase behavior but currently there is a distinction between behavioral and attitudinal loyalty concepts, which has been widely accepted. Attitudinal loyalty is referred to the commitment of the customer towards the objective

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of loyalty, especially the brand or the store. The attitude components to elaborate the phases of latent loyalty and some authors focused on spurious loyalty and its antecedents to explore further dimensions. Researchers distinguish forced, cognitive and inertial loyalties. Cognitive loyalty arises from the perceived functional superiority of the store. Some identifies price and incentivized loyalties that can be categorized as two facets of cognitive loyalty.

Ghazizadeh et al. (2010-b) argues that loyalty is only a valid concept in situations where customers can choose other providers. Companies thus need to understand the nature of their consumers' reasons for staying and must not assume that it is constantly a positive situation. Ghazizadeh et al. (2010-b) added that customer retention improves profitability principally by reducing costs incurred in acquiring new customers. A primary objective of retention strategies must therefore be "zero defections of profitable customers". There is a distinction between customers who are simply retained and those who are loyal. The concept of consumer inertia implies that some customers are only being retained, rather than expressing loyalty. In fact loyal customers are usually less price sensitive and more intend to increase the number or frequency of purchases and may become advocates of the organization. Satisfaction with a bank's products and services thus also plays a role in generating loyalty that might be absent in the retention situation. Therefore, customer loyalty is not the same with customer retention, as loyalty is distinct from simple repurchase behavior.

Razavi et al (2012) Customer loyalty has attracted a considerable attention in the literature in a way that a number of definitions have been proposed for it such as Zeithaml et al (1996) define it as a customer's intent to stay with an organization. In another study, it has been defined as a construct that measures the probability that the customer will return and is ready to perform partnering activities such as referrals.

Razavi et al (2012) also quoted Oliver who defined customer loyalty as "A deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior".

Razavi et al (2012) squeezing from several studies expressed that many service providers consider customer loyalty as a significant source of competitive advantage. Empirical studies demonstrate that keeping a customer can be up to 10 times cheaper than capturing a new one. This importance is accentuated when it is coupled with the claim that the customer's loyalty behavior takes the form of greater collaboration, fewer complaints, less sensitivity to price and, in sum, greater profitability of the customers. The strongest evidence of customer loyalty is the percentage of customers who are ready to recommend others to a particular product or service. Sustained loyalty is attainable when customers exhibit both positive attitude toward the object, and repeat patronage behavior. All in all, loyalty conceptualization has two dimensions, namely attitudinal and behavioral. Attitudinal loyalty mirrors a situation whereby different feelings create an individual's overall attraction to a product, service or

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organization. The attitudinal components of customer loyalty are determined as price sensitivity, brand allegiance, and the frequency of purchasing a particular brand. The other dimension is behavioral which is defined as the intention to stay with the service provider in the future. Loyal customers are inclined to show two behaviors: repurchase behavior and favorable word-of-mouth. Based on the related literature, word of mouth can be interpreted as the frequency or potential to recommend others to patronize the services of a customer's primary company. Customer satisfaction influences the loyalty of customers. Customers are more likely to participate in positive word-of-mouth and repurchase when they are satisfied. Highly satisfied customers of a firm are likely to purchase more frequently in a greater number and also buy other goods and services offered by the same service provider. Razavi et al (2012)

Silva & Yapa (2009) asserted with many citations that customer loyalty is viewed as the strength of the relationship between an individual's relative attitude and repeat patronage. The relationship is seen as mediated by social norms and situational factors. Cognitive, affective, and conative antecedents of relative attitude are identified as contributing to loyalty, along with motivational, perceptual, and behavioral consequences. In the customer-centered business, survival remains to the degree that customer satisfaction is met. Previous research studies have shown that the repurchase intent was the main benefit of customer retention. However, some had identified multiple benefits like repurchase intent, price tolerance, willingness to recommend etc. In reaching retention, vendors should manage satisfaction and consequences of Customer Loyalty. Loyalty too has a pyramid effect that suggests of having hierarchy in loyalty levels between customer and vendor. Change in loyalty level will manifest itself in the presence of specific attitude and.

Bahri-Ammari (2012) stated that customer loyalty allows the company to continue the business relationship over time and to establish and develop a common history. It is expressed by commitment and trust between the exchange actors. It is a dynamic concept that is developed by strengthening mutual commitment and trust in partner. The company aims, through satisfaction, trust and commitment, the loyalty of its most profitable customers. The purpose is to bring them to the highest level of the relationship scale. The prospect becomes progressively buyer, client, supporter, lawyer and partner. A partner is a loyal customer who will recommend the company's products for other potential customers. Thus, the profitability will improve. Loyal customer is one who made other purchases and is and will be less sensitive to high prices. Loyalty is the basis of a psychological process, while retention is far from having a cognitive component. Retention is measured by the duration of time the consumer's purchasing history with the company, while the loyalty is determined by the percentage of requests. Loyalty is measured by emotional and cognitive states. They can be manifested by: attitudinal loyalty, resistance to competing offers, propensity to be loyal, complaining behavior intentions and behavior loyalty.

Anselmsson et al (2007) asserted that customer loyalty offers several benefits: it creates entry barriers for competing brands; makes it possible to charge higher prices; gives the company time to react on competitors innovations; and also function as a buffer in times of intensive price competition. Broadly,

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there are two schools of thought when it comes to defining and measuring brand loyalty: behavioral and attitudinal loyalty.

Trasorras et al. (2009) pointed out that, customers who feel they have obtained value from a product or service might develop loyalty. Loyalty, in turn, breeds retention, which translates into higher corporate profits. Customer defections have a stronger impact on the financial performance of an organization than other factors, as it pertained to gaining competitive advantage. Researches suggest the longer a company keeps a customer, the more profitable that customer becomes. In order to retain customers, it is important to know why customers leave. Not only does a company lose their future profit potential but negative experiences are also shared with colleagues, and that may spur additional defections. The multiple causal factors are pricing, inconvenience, core service failures, service encounter failures, employee responses to failures, attraction by competitors and ethical problems. No single factor was seen as consistent with the switchers, rather various combinations of factors led to customer defection.

Cheng, et al. (2011) referring several studies expressed that customer loyalty can be divided into true loyalty, false loyalty, potential loyalty and no loyalty according to the strength level of the relationship between the personal attitude and repurchase behavior. Customer loyalty refers to a customer's possible repurchase behavior, and willingness to become a member of the service institution. Customer loyalty is the performance of a consumer still choosing the same product or service after comparing it with other competitor's products with the premise that the competitive product can be easily purchased, and it will go through the four stages of perceived loyalty, emotional loyalty, intentional loyalty and action loyalty. In the measurement of customer loyalty, researchers pointed out that the measurement items of customer loyalty in customer behavior intention include: repurchase after the price has increased (price tolerance), priority purchase and recommendation. Customer loyalty can be constructed by the four measurement indexes of the repurchase will, the will of recommending the company or brand to others, price tolerance and cross-purchase will of the customer.

Tu et al. (2011) with several citations revealed that customer loyalty could be classified as brand loyalty, service loyalty, and store loyalty. Some studies distinguished customer loyalty in three approaches including *behavioral loyalty approach*; *attitudinal loyalty approach*, and *integration of attitudinal and behavioral loyalty approach*. The attitudinal loyalty helps to examine the factors of loyalty, to avoid switching behavior, and to predict how long customers will remain loyal. Therefore, viewing loyalty as an attitude-behavior relationship allows integrated investigation of antecedents and consequences of customer loyalty.

Cengiz & Yayla (2007) referred Stank et al. (1999) who specify customer loyalty as a customer's attitude to the service where loyalty has been described as repeat purchase behavior impinged by proper attitudes or as a consistent purchase behavior arising from the psychological decision-making and evaluative process. Customer loyalty is shaped, by a customer's cumulative (long term) experience, with

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the service over time, not by a specific service encounter.

Definition of Customers Loyalty

According to Wijaya (2005) it is not easy to define customer loyalty, as many people and even managers perceive customer loyalty is equal to repeat purchase behavior of the customers. So Leong et al (2012) narrated that yet until now, there are no definite boundaries on the antecedents supporting customer loyalty. But Jumaev et al. (2012) are of the opinion that loyalty is a rich concept with many possible definitions.

Ivanauskiene & Auruskevicien (2009) expressed that there are no common definitions of loyalty - and cited Dick & Basu (1994) who defined loyalty as a consumer commitment to the brand or approach to the brand (service, product category, etc.). Akın (2012) asserted that examining the historical course of the studies with the subject of loyalty it is found that the researches that try to define what loyalty is have significant space. The most basic problem encountered in those studies is the failure to achieve a shared definition of loyalty because although customer loyalty may be a key variable that explains keeping the customer at hand.

Wijaya (2005) quoted a definition of customer loyalty offered by Kotler, Bowen and Makens (1999) as:

> "How likely customers are to return and their willingness to perform partner-shipping activities for the organization". Kotler, Bowen and Makens (1999)

Basarir & Dhaheri (2009) asserted (referring Stone et al., 2000) that:

> "The term customer loyalty is a physical and emotional commitment given by customers in exchange for their needs being meet". - Stone et al., 2000

BOSE and RAO (2011) appended definition of Khan and Khan (2006)

> "Customer loyalty exists when a person regularly patronizes a particular (store or non store) that he or she knows, likes and trusts". Khan and Khan (2006)

Wahab et al (2011) extracting from several studies expressed that today, a number of studies have attempted to define the loyalty. Researchers have used both attitudinal and behavioral measures to define and assess customer loyalty. From an attitudinal perspective consumer loyalty is a specific desire to continue a relationship with suppliers and provider. Wahab et al (2011) quoted Oliver, (1997) and Dimitriades, (2006) who defined customer loyalty. According to Oliver, customer loyalty is "A deeply held commitment to re-buy or re-patronize a preferred product/ service consistently in the future." According to Dimitriades ''loyal'' are defined those customers who hold favorable attitudes toward an organization, recommend the organization to other consumers and exhibit repurchase behavior.

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For brand loyalty Srinivasan (2002) cited Keller (1993), who suggested that loyalty is present when favorable attitudes for a brand are manifested in repeat buying behavior.

Srinivasan (2002) quoted definitions of different researchers for customers' brand loyalty as:

"The preferential, attitudinal and behavioral response toward one or more brands in a product category expressed over a period of time by a consumer." (Engel & Blackwell 1982)

Loyalty is a biased behavioral purchase process that results from a psychological process. (Jacoby, 1971)

Brand loyalty is "a favorable attitude toward a brand resulting in consistent purchase of the brand over time." (Assael, 1992)

Sondoh (2007) cited Oliver (1997) defined customer's loyalty as:

"A deep held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts that have the potential to cause switching behavior" (Oliver, 1997).

Murat & Cevdet (n.d) with citations quoted definitions of several researchers. So according to Jones and Sasser (1995), customer loyalty is defined as a feeling of attachment to or affection for a company's products, services and people. Loyalty is a long-term commitment to repurchase involving both repeated patronage and favorable attitude. In a business context loyalty can be defined as a customer's commitment to do business with a particular organization, purchasing their goods and services repeatedly, and recommending the services and products to other people.

Durukan & Bozaci (2011) stated that customer loyalty, which is defined as preferring a specified company in repurchases, plays a critical role to be successful in today's competitive business environment. Durukan & Bozaci (2011) narrated that loyalty is generally expressed with some kinds of words like sincere devotion, fidelity and friendship. Consumer loyalty is defined as the tendency or behavior of preferring same firm in repurchases, which has attitudinal and behavioral dimension. In other words it can be defined as consumer's desire and action to prefer a specified firm when it comes to purchasing.

Jandaghi et al (2011-a) defines loyalty as: "it is a strong commitment to superior services or goods repurchase in future to acquire the same brand despite of marketing efforts by potential rivals and their impacts. McCain et al (2005) wrote that loyalty has been defined as repeat purchase behavior led by favorable attitudes or as a consistent purchase behavior resulting from the psychological decision-making and evaluative process.

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About Behavioral and attitudinal definition Sondoh (2007) wrote that behavioral loyalty has been considered as repeat purchase frequency or proportion of purchase, whereas attitudinal brand loyalty included "stated preferences, commitment or purchase intentions of the customers". Most of these behavioral definitions above are criticized, arguing that "all of these definitions suffer from the problem that they recorded what customer did, and none tapped into the psychological meaning of loyalty". The composite definition of loyalty emphasized two different approaches of loyalty: the behavioral and attitudinal concept. A conceptual definition of brand loyalty is: (i) biased (i.e. non-random), (ii) behavioral response (i.e. purchase), (iii) expressed over time, (iv) by some decision-making unit, (v) with respect to one or more brands out of a set of such brands, and is a function of psychological (decision-making evaluate) processes.

Benefits of Customers Loyalty

After visiting the literature Dharmalingam et al. (2011) are of the opinion that it is better to look after the existing customer before acquiring new customers. The advantages of customer loyalty are:

- The service cost of a loyal customer is less than new customers
- They will pay higher costs for a set of products; and
- For a company, a loyal customer will act as a word-of-mouth marketing agent

The most research on customer loyalty has focused on brand loyalty; on the other hand, a limited number of researches on customer loyalty have focused on service loyalty. Customer satisfaction is influenced by the quality of service & product and price as well as the situational and personal factors.

Cheng, et al. (2011) revealed that for the service industry, the cost of developing a new customer is at least 5 to 9 times the cost to maintain an old customer. If the customer loyalty can be increased 5% effectively, then 25-85% profit can be increased. Therefore, if the service industry wants to reduce the expenditures on money and time cost, it shall focus on maintaining customers, not obtaining new customers. It will bring a long-term or short-term profit by maintaining a long-term relationship with the customer. It can be seen that the importance of customer loyalty establishment on the service industry operation cannot be understated. If the food service industry can keep the customer and make him/her a loyal customer, then it will also be able to bring long-term operating efficiency.

Tu et al. (2011) with several citations revealed that customer loyalty is a strategy that creates mutual rewards to benefit firms and customers. One benefit is that firms can increase the revenue. With loyal customers, companies can maximize their profit because loyal customers are willing to (1) purchase more frequently; (2) spend money on trying new products or services; (3) recommend products and services to others; and (4) give companies sincere suggestions. Studies further indicate that customer loyalty provides a foundation for a firm to examine their marketing strategy, relationship quality improvement activities, and value creation program. Thus, loyalty links the success and profitability of a firm. Tu et al. (2011) further argued that with loyal customers, companies could reduce the operating cost

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and acquisition expenses. An improvement of 5 percent in customer retention leads to an increase of 25 percent to 75 percent in profit. It costs more than five times as much to obtain a new customer than to keep an existing one.

Cengiz & Yayla (2007) quoting many studies argued that it's a clear fact that, customer loyalty can lower costs and increase profitability. The cost of recruiting a new customer is said to be five times more than the cost of keeping an existing customer. The costs of customer retention are in fact less than the relative costs of customer acquisition, and loyal customers, if served correctly, are said to generate increasingly more profits each year when they stay with a company. Customer loyalty should be realized through customer satisfaction, ground on the perceived performance of the service product; therefore service quality and customer satisfaction are two prerequisites of loyalty. Further, in the last decade researches on loyalty have emphasized its positive effects on customer satisfaction. Perceived service quality has also been found to have a positive association with customer loyalty and has even been said to be a key determinant of service loyalty. Though satisfaction is modeled as the only immediate antecedent of loyalty, other key drivers of loyalty include service quality and customer expectations.

These benefits are described in Table-1 and Table -2. Table-1 is shows cost of acquiring new customers as compared to customer retention and Table -2 and showing percentage increase of profit by 5 percent customer retention.

Table-1

Showing Cost of Acquiring new Customers as Compared to Customers Retention

Researcher Name	**Benefit of Retention of old Customer as compared to new customer**	**Cost of acquiring new Customer compared to retaining old customer**
Kuusik (2007)		6 - times
Cengiz & Yayla (2007)		5 - times
Tu et al. (2011)		5 - times
Cheng et al (2011)	-	5 to 9 times
Jandaghi et al (2011)		15 times
Razavi et al (2012)	10 – times cheaper	

Table-2

Showing Percentage Increase of profit by 5 Percent Customers Retention

Researcher Name	**Prcentage Increase in Customers Retention**	**Prcentage Increases in Profits**
Rigby et al (2003)	5	25-95
Yoo & Jae (2005)	5	25~85

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Li & Green (n.d.)	5	25~85
Sondoh (2007)	5	25–95
Kuusik (2007)	5	60
Cheng et al (2011)	5	25~85
Wel et al (2011)	5	25~125
Tu et al. (2012)	5	25–75
Valenzuela (2012)	5	100
Jandaghi et al (2011)	5	25~85

Conclusion

From the study of above literature it is revealed that customer loyalty originally referred to repeated purchase behavior but currently there is a distinction between behavioral and attitudinal loyalty concepts (Gyulavári 2010). However Marshall (2010) is of the opinion that loyalty is much more than just repeat purchases as oftentimes repeat purchase may be the result of inertia, indifference or exit barriers. Customer retention improves profitability principally by reducing costs incurred in acquiring new customers. With loyal customers, companies can maximize their profits. Loyal customers are willing to (1) purchase more frequently (price insensitivity), (2) try the firm's new products or services (repurchase intention), (3) recommend products and services to others (word-of-mouth), and (4) give companies suggestions (complaint behavior) (Reichheld & Sasser, 1990). Loyal consumers have (1) high purchase intention (repurchase intention), (2) less price sensitivity (price insensitivity), (3) feedback to the firm (word-of-mouth, complaint behavior), and (4) do more business (frequent purchase and no switching behavior). There is a chain of effects and the links in the chain are as follow: Profit and growth are stimulated primarily by customer loyalty. Loyalty is a direct result of customer satisfaction. Satisfaction is largely influenced by the value of services provided to customers and satisfied, loyal, and productive employees create the value. Hence it is concluded that retention of old customers is much cheaper than acquiring new customers or acquiring new costs customers is 5 to 10 times more than customer retention as explained in Table -1. Retention of old customers enhances profit as described in Table – 2.

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