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# CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	<b>ORGANIZATIONAL CITIZENSHIP PERFORMANCE AS AN ANTECEDENTS TO ORGANIZATIONAL PERFORMANCE: AN EMPIRICAL STUDY</b> <i>DR. M. RAMAKRISHNAN</i>	1
2.	<b>AN ANALYSIS OF THE EFFECTS OF MOBILE MONEY TRANSFER (MMT) ON WATER BILL DEFAULT RATIO: A CASE OF NAKURU WATER AND SANITATION SERVICES COMPANY (NAWASSCO)</b> <i>SAMUEL KIMANI KAMAU, MARY BOSIRE &amp; IRENE RIUNGU</i>	7
3.	<b>IMPACT OF CORPORATE GOVERNANCE ON CORPORATE REPUTATION</b> <i>V. KUMARAN &amp; DR. R. THENMOZHI</i>	13
4.	<b>ANALYSING THE GLOBAL IMPACT OF VOLATILITY ON THE INDIAN STOCK MARKET</b> <i>DR. K. K. DAVE &amp; SONAL SINGHVI</i>	19
5.	<b>SECTORAL INDICES: ANALYSIS AND IMPACT ON NATIONAL STOCK INDEX</b> <i>DR. JAGDEEP SINGH, HERPREET KAUR &amp; NITU GUPTA</i>	26
6.	<b>WORK LIFE BALANCE (WLB): A CHALLENGE FOR EMPLOYEES IN INDIA</b> <i>DR. POOJA DASGUPTA &amp; KHUSHBU DUBEY</i>	29
7.	<b>ANDROID HUMANOID ROBOT - (HRP-4C)</b> <i>ANURAG GUPTA</i>	33
8.	<b>STUDY OF IFRS AND HARMONIZATION WITH COUNTRY SPECIFIC ACCOUNTING STANDARD</b> <i>DR. SREEMOYEE GUHA ROY</i>	35
9.	<b>CONSUMER PREFERENCE TOWARDS PACKED WATER IN TUTICORIN</b> <i>S. ATHILINGA SENJITH</i>	42
10.	<b>A STUDY ON THE CUSTOMER PERCEPTION TOWARDS E-BANKING INRAIPUR CITY</b> <i>NAZHAT TAHSEEN</i>	45
11.	<b>MORALE AND MOTIVATION</b> <i>DR. ANJALI SRIVASTAV</i>	51
12.	<b>VIRTUAL CURRENCY – EMERGENCE OF BITCOIN</b> <i>K. SHREE JYOTHI, Y. KALYANI &amp; S. SANGEETA</i>	53
13.	<b>DIGITAL MARKETING MIX OF FLIPKART: AN OVERVIEW</b> <i>SHEENA DAS &amp; SENTHIL KUMAR.R</i>	58
14.	<b>BIG DATA USING HADOOP MAP REDUCE</b> <i>TAYYABA HASHMI &amp; PRAMILA SHINDE</i>	60
15.	<b>INVESTORS PREFERENCE TOWARDS VARIOUS INVESTMENT OPTIONS</b> <i>DR. SHUBHRA GUPTA &amp; PRIYANKA MADAN</i>	64
16.	<b>A CONCEPTUAL STUDY ON PEOPLE MANAGEMENT: CHALLENGES AND ISSUES FACED BY THE CORPORATE</b> <i>USHA SHREE.V</i>	69
17.	<b>EFFECTS OF ORGANIZATIONAL POLITICS ON EMPLOYEE PERFORMANCE AT CONTAINER FREIGHT STATIONS (CFS) IN MOMBASA COUNTY</b> <i>TERESIAH WAIRIMU KARANJA &amp; DR. JOSEPH OBWOGI</i>	75
18.	<b>NEED OF MICRO INSURANCE IN INDIAN SCENARIO WITH SPECIAL REFERENCE TO UDUPI DISTRICT</b> <i>MALLIKA A SHETTY</i>	79
19.	<b>REACHING TOWARDS ORGANIC FARMING</b> <i>SHALLU</i>	88
20.	<b>PERFORMANCE OF INDIA'S AND CHINA'S MANUFACTURING GOODS EXPORT TO BANGLADESH: CONSTANT MARKET SHARE ANALYSIS</b> <i>MANJEETA SINGH</i>	93
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	98

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## ORGANIZATIONAL CITIZENSHIP PERFORMANCE AS AN ANTECEDENTS TO ORGANIZATIONAL PERFORMANCE: AN EMPIRICAL STUDY

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### ABSTRACT

*In SHRM research, attention has been devoted to examine the relationship between single or multiple HRM practices and Organizational performance. There is a lack of consensus among SHRM researchers over the direct relationship between HRM practice and organizational performance. The issue of intervening process or otherwise missing 'black box' in explaining HRM – Organizational Performance relationship is quite often raised in the existing literature and only handful numbers of empirical studies are available in this respect to explain impact of HRM practices on organizational performance. The existing body of literature supports relationship between HRM practices and HRM outcome variables such as satisfaction, commitment. Very negligible attempt has been made by scholars to examine the impact of HRM outcome variables on Organizational Performance. This study was conducted with an objective of finding impact of one of the most critical variables Organizational Citizenship performance, as an antecedent HRM outcome variable, on organizational performance. The study was conducted in the leading Engineering units having different product lineSBUs focusing automobile sector. The study finding indicates a stronger influence of organizational Citizenship on Organizational performance.*

### KEYWORDS

organizational citizenship, organizational performance.

### INTRODUCTION

The subject matter of people management practices and its impact on performance of an organization is the central theme of articulation for management researchers, for the last one and half decades. A plethora of ideologies have been shared by academicians and numerous research papers on the subject of Human Resource Management (HRM) practices and performance have occupied volumes of leading research journals. Behavioral related stream of research have emphasized that the direct linkages between HRM practice and performance can not be established unless mediating issues such as employee satisfaction, commitment etc are properly investigated. The concept of employment commitment lies at the heart of any analysis of Human Resource Management. Indeed, the rationale for introducing Human Resource Management practices is to increase levels of commitment of positive outcomes. The literature defines commitment as an employee's level of attachment to some aspect of work. Literally hundreds of articles / research works have also been published on the concept of satisfaction and commitment since its introduction to organizational behavior research in the early 1950. It is empirically established that properly configured HRM practices have consequences on the attitudes and behaviour (task/non-task oriented behaviour) of employees and ultimately it impacts the organizational performance. This present study has been undertaken to explore the relationship between non task oriented behaviour, which is labeled as organizational citizenship performance (OCP), and organizational performance (OP) since these variables are less researched in the Indian business context.

### LITERATURE REVIEW

Organizational commitment has, for many years, been identified as a central construct in understanding levels of relationship between the employee and the employer (Mowday, Steers and Peter, 1982; Mathieu and Zafac, 1990; Allen and Mayer, 1996; Herscovitch and Topolnystsky, 2002). Definitions of the construct "commitment" indicate its significance in binding the individual both to organization and to the course of action which are relevant to the target of the commitment (Meyer and Herscovitch, 2001). As regards to courses of action relevant to commitment, further relationships have been identified between components of organizational commitment and a range of discretionary and extra role behaviors or otherwise considered as non task oriented behaviour exhibited by individuals at worksite (Meyer and Herscovitch 2001).

In his seminal paper, Organ, (1977) argued that some aspects of employee performance engendered by job satisfaction and commitment might not be acknowledged in existing literature. This thought provoking paper had triggered a series of research in the area of beneficial non-task behavior of employees which otherwise recognized as discretionary and extra role behaviour at works and its impact on employee performance. The research area of non task behaviour was further explored by Bateman and organ (1983) and Smith, Organ and Rear (1983). Bateman and Organ, (1983) coined the term "**Citizenship Behaviour**" and explained organizationally desirable extra role behavior as citizenship behavior. Even in the seminal paper, Organ (1977) referred about organizationally desirable behavior and the significant relationship between desirable citizenship behaviour and levels of job satisfaction leading to organizational performance was empirically proved by many scholars.

In the existing literature, performance is broadly classified into contextual performance and task performance. Borman and Motowidlo, (1993) defined "contextual performance" as behaviors supporting organizational, social and psychological environment in which the technical core must function. They made a distinction between 'contextual performance' and 'task performance' of formally identified aspects of Job (Campbell, 1993). The contextual performance is considered as more of non task / extra role or otherwise discretionary behaviour. It was argued that while technical proficiency is a fundamental requirements for a task performance and contextual performance is independent of technical proficiency (Borman and Motowidlo, (1993) as quoted in Coleman and Borman (2000); Motowidlo and Van Scotter (1994). Another distinction has been suggested by Van Scotter and Motowidlo, (1996), that task performance differentiates one job from another, while contextual performance is common to most jobs. Motowidlo and VanScoter, (1994) established the distinction between task and contextual aspects of performance. They showed that task and contextual performance contributed independently to overall performance assessment. They also found that different individual variable associated with task performance and contextual performance. While experience correlated significantly more with the task performance than it did with contextual performance, the reverse was the case with personality variables like work orientation, dependability, co-operativeness and internal control.

Different dimensions have been formulated by different researchers to explain the concept of contextual performance. Borman and Motowidlo, 1993(cited again in Mortorwildo and Van Scotter, 1994) conceptualized five dimensions of contextual performance – viz,

- Persisting with extra enthusiasm when necessary to complete own task activities successfully
- Volunteering to carryout task activities that are formally part of job
- Helping and co-operating with others
- Following organizational rules and procedures even when it is personally inconvenient.
- Endorsing, supporting and defending organizational objectives

Vanscotter and Motowidlo,(1996) conceptualized two dimensions viz.(a)Interpersonal facilitation (co-operative, considerate and helpful acts that assist co-workers performance)(b) Job dedication(self-disciplined, motivated acts such as working hard taking initiatives and following rules to support organizational objectives). A closer examination of five dimensions conceptualization as discussed above, with that of two dimensions would reveal that first and second

dimensions manifest in the job dedication of Van Scotter's works. Remaining three dimensions of Borman and Motowidlo reflect in combination of interpersonal felicitations and job dedication dimensions of Van Scotter's work and it is more covered in contextual performance.

Coleman and Borman, (2000) refined and integrated various concepts such as contextual performance, job dedication and citizenship behaviour and covering it as beneficial non-task employee behaviors and dimension used in their works include:

- Citizenship behaviors directed towards individuals
- Citizenship behaviors towards organization
- Citizenship behaviors towards job / task.

Even though the last dimension of the above work resembles job dedication dimensions of Van Scotter, it is indistinguishable from task performance. Scullen, Judge and Mount,(2003) conceptualized contextual performance as high order of construct and treating citizenship performance as lower order factors as dimensionalised by Coleman and Borman.

Further it is evidenced from analyzing various scholarly works that the concepts are interchangeably used and the multiplicity of concepts on contextual performance necessitated concept clarification. Organ,(1997)made an attempt to clarify after reviewing various constructs discussed herein and suggested to use organizational citizenship behaviour (OCB) more along lines of Contextual performance. Organ, (1988), as quoted in Organ, (1997) has defined organizational citizenship behavior as," individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in aggregate promotes the effective functioning of organization". As mentioned earlier, contextual performance has been defined as 'behavior supporting organizational Social and psychological environment in which the technical core must function' (Borman and Motowidlo, (1993), Kiker and Motowidlo (1999).

Further Coleman and Borman, (2000) provided support for Organ's view of continuing with label of organizational citizenship behaviour for easy communication, through this favoured the specification of Contextual performance and used the label 'citizenship performance' interchanging with OCB. Johnson (2001) confirmed in his research showing that citizenship performance can be another label for contextual performance. Borman, Penner, Allen, Motowidlo (2001) used contextual performance and citizenship performance interchangeably in their studies. To clarify context, it is appropriate to prefix a word organizational and term the concept as 'organizational citizenship performance' (OCP). Employees who do certain activities spontaneously, that goes beyond the defined call of duty but valued by the management as good performance. In any given business operational situations, the manager cannot visualize or forecast all possible contingencies that are likely to impede organizational effectiveness and any volitional behavior beyond call of duty would improve organizational performance in contingency situation. (Katz and Kahn, 1978, organ 1989) Any work behavior that goes beyond the reach of organizational measures of job performance holds promise for long term organizational success. VanDyne, Graham and Dienesch 1994 viewed that these types of behaviors are purported to improve the organizational efficiency, effectiveness and adoptability or otherwise act as enhancer of organizational performance. Doing jobs beyond what is required without operating to be rewarded is what is referred to in this study as Organizational Citizenship Behavior (OCB) since behavior is equated with performance and is otherwise referred in this study as Organizational citizenship performance (OCP). The same behavior pattern identified and labeled as *pro-social behaviour* (Briefand Motowidlo, 1986) and Organizational spontaneity (George and Brief, 1992) are often used interchangeably with OCP in the present literature.

It is deduced from the above review of literature that OCP, being non task behaviour, relates to organizational commitment and acts as facilitators of organizational performance and supplement efforts made in task performance motivated by goal internalization occurs, when the individual adopts attitudes and behaviors because their content is congruent with the individuals personal value system. Several researches have suggested an individual's motivation will be significantly related to his or her organizational citizenship behavior (Penner, 1997, Tang and Ibrahim, 1998).

For the purpose of this study Van Scotter dimensions of interpersonal facilitation or otherwise referred as contextual performance and job dedication are adopted as independent variables.

Organizational performance is probably the most widely used dependent variable in organizational research today (Rogers and Wright, 1998). Yet at the same time it remains one of the vaguest and loosely defined constructs. Performance is measured in terms of output, outcome, profit, internal processes and procedures, organizational structures, employee attitudes, organizational responsiveness to the environment and so on. The views expressed by leading theoreticians confirm that the organization performance is a very complex concept and requires multiple measures. (Cameron, 1986, 1995; Meyer and Gupta, 1994). For the purpose of this study, perceived views of the respondents are solicited on the following aspects such as Level of profitability, Growth rate of revenues, Market share, Quality of products and services, Cost of poor quality, Innovativeness, Employee Relationship and engagement, satisfaction, Customer relationship & satisfaction, Corporate social responsibility and Stability in level of overall performance from year on year.

There has been much research conducted on the topics broadly discussed above, but the relationship between OCP and OP is still relatively less explored area of study in the Indian organizational context. This present study has been undertaken to explore the relationship between organizational citizenship performance (OCP) and organizational performance (OP).

**OBJECTIVES OF THE STUDY**

The literature review highlights the relationship that might exist between the respondents' perception of the organizational citizenship performance and the organizational performance. The prime objective of this study is to examine direct relationship between organizational citizenship performance (OCP) and the organizational performance (OP).

**RESEARCH HYPOTHESIS**

Based on the extensive review of literature and research questions set out for undertaking this research work, the following null and alternative hypothesis was formulated to test the relationship between Organizational citizenship performance and organizational performance.

**HO:** Organizational citizenship performance (Contextual performance and job dedication together) will not significantly relate with Organizational performance.

**HA:** Organizational citizenship performance (Contextual performance and job dedication together) will significantly relate with the Organizational performance.

**DEFINITION OF STUDY VARIABLES**

All variables studied in this research work are defined and constitute definitions are provided below:

**CONSTITUTIVE DEFINITION OF STUDY VARIABLES**

1	<b>Organizational Citizenship Performance (IV)</b>	Discretionary extra role behavior that are not a formal part of job but benefit the organization.
2	<b>Organization Performance (DV)</b>	Perceived Organizational Performance comparing similar performing organization in the sector / industry / business in terms of organizational performance.
3	<b>Age</b>	Years as of last Birthday
4	<b>Band</b>	Classification of Managerial Staff group into upper / middle / front line managers
5	<b>Tenure</b>	Length of time worked in the present organization.
6	<b>SBU</b>	Business portfolio segmented on the basis of products manufactured.

**RESEARCH METHODOLOGY**

**SAMPLE DESIGN**

The population for this study composed of all managerial staff of the SBUs of a larger Engineering Company situated in the city of Chennai and having its factory, sales office spread over various parts of the country. These Strategic Business Units are having Business Portfolio of manufacturing and selling of bicycles, precision steel tubes for making auto components manufacturing, passenger car door frame making and industrial chains units (SBU) activities. From the study

units, all managerial staff cadre details covering name, designation, grade, name of SBU were taken for the preparation of sampling frame document. It is the normal practice that if a population from which a sample is to be drawn does not constitute homogeneous group, *stratified random sampling* technique is generally applied in order to obtain a representative sample. The present study being the nature of finding relationship between OCP and OP, it was decided to treat all four Strategic Business Units as strata since sub-populations. The SBUs are individually more homogeneous than the total population. The nature of business of each SBU was taken as common characteristics for dividing into stratum. The method of proportional allocation was followed to get the desired size of the sample from each stratum.

#### POPULATION AND SAMPLE SIZE COMPUTATION

S. No.	Strategic Business	Managerial Staff (n)	Intended Sample (n)	Sample used for Study (n)
1	Bicycle business	183	92	90
2	Steel tubes and strips business unit	277	138	130
3	Car door frame business unit	64	32	31
4	Chain business unit	152	76	75
	<b>TOTAL</b>	<b>676</b>	<b>338</b>	<b>326</b>

#### INSTRUMENTS FOR DATA COLLECTION

For the purpose of the present study, a survey questionnaire was constructed. The psychometric properties tested scale with twenty six items developed and used to measure organizational citizenship performance. The independent variable OCP had two dimensions viz., job dedication and contextual performance. There were twelve measures chosen to ascertain perceived organizational performance from the respondents to compare the performance of the study organization with the best performing similar organization in the chosen sector of the industry.

The questionnaire response format was used as a 5 point Likert type scale ( 1 = strongly disagree 2 = Disagree 3 = Neither agree Nor disagree 4 = agree 5 = strongly agree ). The responses were slightly modified in line with words like effective, importance depending upon the nature of responses solicited from the respondents. A consistent response format of 1 and 2 being negative ( bottom box ) and 4 and 5 being positive ( Top box ) was used for all sections of the questionnaire to reduce respondent confusion, yet provide adequate variability for the various scales as explained. Whenever original scale item measures in reversal form the same was retained in the questionnaire for the purpose of preserving original identity. All items were selected from the scales that have been shown to have good reliability and validity.

#### ANALYSIS

The selective demographic variables of respondents covering age group, tenure in the study organization, and hierarchical levels of managerial staff are tabulated and presented in Table 1.

It may be observed from Table 1 that 31.6% of the respondents were between the age group of 30- 35 and more or less equal percentage of 33.10 was in the age group of 35-40 years. This indicates that majority of the respondents (n = 211) relatively fall in this category and a very negligible percentage of 8.90 % was in the age group of more than 40 years (n = 29). Around one fourth of the respondents (cumulative percentage 26.38%) were between the ages of 18 and 25 (n = 86). The survey participants average age was 33.7 years.

From the table 1, it may be noted that nearly one third of the respondents had less than five years of tenure (n=101) and another one third of the respondents had 5-10 years of service in the organization. Negligible percentage of the respondents (1.23%) had more than 20 years of service. This indicates that the organization had wider dispersion of respondents in terms of tenure up to 15 years in the organization. Average tenure of respondents in the organization was 7.4 years.

According to table 1, 59.2% of respondents (n=193) were placed in the middle management hierarchy and the remaining respondents occupied either upper or lower levels of managerial positions.

Results of factor analysis of "Organizational Citizenship Performance" are given in Table No. 2. There were twenty six items entered for factor analysis using principal component analysis (PCA) with varimax rotation. All twenty six items emerged as two interpretable factors with item loadings more than 0.40.

The first interpretable factor with nineteen items was labeled as "contextual performance" with Eigen value of 13.401 and accounted for 51.54% of proportion of variance. The second factor with seven items was named as "Job dedication" with Eigen value of 6.736 and accounted for 25.90% proportion of variance.

Table 3 shows the mean and standard deviations of all the study variables. Scores of the negative items (reverse items) statements in the questionnaire were reversed for computing mean and standard deviation values of study variables. It is noted from the table that contextual performance dimension of OCP exhibited more variance than the second dimension Job dedication.

Table 4 deals with the results of bivariate correlations among the study variables with dependent variable Organizational performance. Correlation matrix is the pivotal information for most multivariate procedure and matrix information confirms that all the independent variables had stronger association with the dependent variable. Both dimensions of OCP were very significantly correlated with organizational performance.

Results of regression analysis of OCP and OP were presented in the Table 5. Inclusion of items pertaining to organizational Citizenship performance in the regression equation resulted in positive relationship with organizational performance. This is inferred from the F statistical significance, R square value, adjusted R square values and multiple R.

Table 5 explains the relationship effects of organizational citizenship performance with organizational performance. From the empirically tested model, it may be noted that explanatory power of the model was at 89.1% by including both the dimensions of organizational citizenship performance as an independent variable in the equation, to explain variance in organizational performance (Multiple R = 0.944;  $R^2 = 0.891$ ; adjusted  $R^2 = 0.889$ ,  $F = 114.61^{***}$ ).

Multiple R = 0.944 confirmed that the causal relationship between OCP and op were very well established. Further it is noted that OCP as independent variable had explained significantly 89.1% variance in OP. Hence the null hypothesis is rejected and accordingly it is concluded that organizational citizenship performance is significantly related with organizational performance. Further it is found that the difference between R square and adjusted R square value is very negligible and thereby the model is accepted.

#### DISCUSSION

The collective attitudes of managerial staff in an organization have a great potential to have an impact on organizational performance. Analyzed results from the correlation matrix and results of regression model indicate the existence of strong positive relationship between OCP and OP. The results of this study generally supported our predictions and although the results of this study were based on a relatively from four different SBU under common management, the consistency in pattern of correlation and results regression indicate the presence of OCP as a stronger antecedent variable to explain impact its on organizational performance.

The results drawn from this study would help employers to capitalize on the social exchange dynamics that exist in the study organization, by concentrating on employees' perceptions on OCP and organizational performance. Such understanding concerning the managers will provide clues to the organization on what they need to do in promoting different types of OCP. Managers will also be able to better manage and provide the relationship between meaningful organizational attitudes and beneficial organizational behaviours of their employees in terms of improved performance.

Findings suggest that explanatory power of the model was significantly (in terms of explaining percentage of variance) enhanced on introduction of organizational citizenship performance in the equation. Evidence in the empirical literature showed that organizational citizenship performance has a direct effect on employees' performance beyond their job scope (Rajivkumar, 2005). This study confined its scope to managerial staff and it is natural that managerial staff being superiors in most of instances and when the subordinates see their superiors giving them support and encouragement to them at work and make

them to demonstrate OCP behaviours. In an environment in which the relationships are important, the superior's emotional support and guidance appeared to assist the subordinates in higher level of performance.

The results of the study also implied that having good team work and team cohesiveness through superior subordinate relationship at the work place leads to employees growing more confident in terms of their appearance, ability and power (Buss, 2001). The existence of team work, team cohesiveness and employee engagement is indicator of satisfied relationship prevailing in the study organization. When employees are satisfied and hoping with their interactions with superiors, they feel worthy of themselves which may be described as an issue of character (Buss, 2001). The practicing professionals thus can benefit from the study through the understanding of how relationships portrayed by the superiors can play a major in put in influencing subordinates to perform work that goes beyond the call of duty without expecting to be rewarded which is otherwise considered as OCP by some known scholars in this stream of research.

This study has focused on OCP as being important in influencing performance because spontaneous, cooperative behaviors on the part of employees that may go beyond their formal work requirements are necessary for the accomplishment of organizational goals (Katz & Kahn, 1966). Consistent with Katz and Kahn's (1966) claim, this study has chosen OCP as study variable since employees exert more discretionary effort in the from of non task oriented behaviour and engage in organizational citizenship behaviors that favorably influence organizational performance (Bowen, Schneider, & Kim, 2000; Morrison, 1997). Podsakoff and his colleagues (2000) suggest that OCP enhance customer satisfaction at the unit level when employees help each other with work-related problems, thereby freeing the manager to spend more time on other productive tasks. Meta-analysis of OCP by Podsakoff, MacKenzie, Paine, and Bachrach (2000) suggests an even stronger relationship, with OCP accounting for roughly 38% of the variance in customer satisfaction indicators. On the other hand, this study findings suggest that OCP as an independent variable explained 89.1% of variance in Organizational performance. Thus, accordingly, it is concluded that there is stronger relationship between OCP and OP.

## CONCLUSION

This research study was able to explain and have provided a clearer understanding of the relationship between OCP and OP. Empirical finding suggests the existence of significant relationship between study variables. Finally, despite the limitations of this study, this research produced consistent and reliable results which led to the overall conclusion that this research was able to achieve its key objective of assessing the impact of OCP behaviour on organizational performance and in the process, all study variables got statistically tested and the same will ultimately facilitate and foster a better understanding of the relationship between OCP behaviour at managerial levels and organizational performance through direct relationship path.

In over all conclusion, it must be reiterated that organization should place adequate emphasis on modeling and designing managerial practices using various techniques (like study units using Policy deployment and Balanced score card) in such a manner so as to make satisfied and committed managerial force contributing for a higher order organizational performance by way of exhibiting OCP behaviour pattern and there by, HRM professionals can also demonstrate their professional contributions for business and organizational growth through showcasing direct such extra role behaviour on organizational performance.

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APPENDIX

TABLE NO. 1: PROFILE OF THE RESPONDENTS Sample (n) = 326

Age Group	Frequency	percentage
Up to 25 years	34	10.45
25-30	52	15.95
30-35	103	31.60
35-40	108	33.10
> 40	29	8.90

Years of Experience	frequency	percentage
Up to 5 years	101	30.98
5 – 10	106	32.52
10-15	85	26.07
15-20	30	9.20
> 20	4	1.23

Managerial level	frequency	percentage
Top management	39	11.96
Middle management	193	59.20
Front line Executive	94	28.84

TABLE NO. 2: RESULTS OF FACTOR ANALYSIS OF STUDY VARIABLES

s.no	ITEMS	Contextual performance	Job dedication
1	In my unit employees put heart and soul in job	0.31	<b>0.838</b>
2	Employees decisions are oriented towards organizational interest	0.288	<b>0.912</b>
3	Employees in my organization are willingly put in extra time on the job	0.138	<b>0.781</b>
4	Employees in my workgroup gladly take on other people’s responsibilities in an emergency	0.299	<b>0.898</b>
5	In my organization employees do not like to work on stretch goals (R)	0.554	<b>0.729</b>
6	Employees in my group are encouraged to do their job the way they see it.	0.536	<b>0.691</b>
7	All employees willingly go beyond call of duty	0.618	<b>0.665</b>
8	Within my work-team , I try not let formal hierarchy ( of team members ) hinder the work	<b>0.91</b>	0.365
9	I try to create a cheerful atmosphere at workplace	<b>0.906</b>	0.367
10	I try to ensure my customer’s needs are fulfilled	<b>0.694</b>	0.114
11	While telling something unpleasant to other people in the organization , I take care so as not to hurt their feelings	<b>0.847</b>	0.296
12	I participate regularly in events that lead to team building ; (eg) going together on outings with colleague	<b>0.898</b>	0.392
13	I empathetically listen to problem of other people In this organization	<b>0.899</b>	0.399
14	I Motivate a colleague to go for further studies / skill building that would enhance his / her work – related capacity and help him / her in career	<b>0.87</b>	0.444
15	I comfort my organization by giving suitable support in the event of crisis like non-receipt of quality product / component etc., time delay in completing tasks , Fire incidents etc.,	<b>0.876</b>	0.404
16	I helped peers on issues other than their work; for example, helped a colleague in putting up a case with consumer's court when a doctor wrongly diagnosed him with a serious disease and it caused his family a lot of tension etc	<b>0.413</b>	0.103
17	If outsiders have any misconceptions about my organization, I clarify, even though it was not my explicit duty	<b>0.905</b>	0.35
18	I try to improve the safety of working conditions (like arranging for shoes, other necessary equipment, etc) by talking to suitable people/higher authorities in this organization	<b>0.64</b>	0.353
19	I try to participate events that lead to team bonding; for example, going together on outings, having joint reading sessions, etc with coworkers	<b>0.913</b>	0.326
20	I motivate people of my organization for all development and attainment of organizational objectives even though this was not my explicit duty	<b>0.763</b>	0.506
21	I try to motivate a junior or new colleague	<b>0.887</b>	0.387
22	I discuss any perceived harm from outsiders to this organization with suitable people/higher authorities of this organization	<b>0.876</b>	0.439
23	I do not give credit to coworkers/juniors for some good work done by them (R)	<b>0.905</b>	0.394
24	I encourage silent members to speak up in meetings/trainings/workshops, etc	<b>0.358</b>	0.107
25	I take care of norms and customs of my organization	<b>0.415</b>	0.182
26	I try to facilitate meetings in such a way that even weaker members could speak, still not making stronger members feel offended	<b>0.816</b>	0.361
	<b>Eigen Value</b>	<b>13.401</b>	<b>6.736</b>
	<b>Proportion of variance</b>	<b>51.543</b>	<b>25.907</b>

TABLE NO. 3: MEAN, STANDARD DEVIATION OF STUDY VARIABLES

	Contextual Performance	Job dedication	Org. Performance
Mean	69.89	27.01	32.41
Std. deviation	24.04	7.43	5.36

TABLE NO. 4: CORRELATION COEFFICIENT OF STUDY VARIABLES

	Contextual Performance	Job dedication	Org. Performance
Contextual Performance	1.000		
Job dedication	0.641**	1.000	
Org. Performance	0.766**	0.452**	1.000

\*\* < 0.01 (2tailed)

TABLE NO. 5: RESULTS OF REGRESSION ANALYSIS OF ORGANIZATIONAL CITIZENSHIP PERFORMANCE AND ORGANIZATIONAL PERFORMANCE

	Contextual Performance	Job dedication
Std. Coefficient $\beta$	0.916***	0.379***
"t" value	24.386	13.780
Multiple R	0.944	
R square	0.891	
Adj. R square	0.889	
F	114.61***	

$p < 0.01$ \*\*\*



## AN ANALYSIS OF THE EFFECTS OF MOBILE MONEY TRANSFER (MMT) ON WATER BILL DEFAULT RATIO: A CASE OF NAKURU WATER AND SANITATION SERVICES COMPANY (NAWASSCO)

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### ABSTRACT

The study sought to analyze the effect of mobile money transfers (MMT) on default ratio using the case of M-pesa (Mobile Pesa- Swahili word for Money) at NAWASSCO. This study was a case study which targeted 24,724 household clients of NAWASSCO. The study period was four years (July 2007 –December 2011). The objectives were; to determine the usage of M-pesa payments at NAWASSCO and to analyze the effect and relationship of M-pesa usage on default at NAWASSCO. Using a data capture sheet, secondary data was collected on the volume of bills issued and paid monthly within the period from Finance Department. Data was divided into two samples representing two time periods i.e. from July 2007 to June 2009 (pre-Mpesa) and January 2010 to December 2011 (post-Mpesa). Line graphs showed that M-pesa usage picked an upward trend throughout the study period. Debtor collection periods reduced during post M-pesa period. A test of significance gave a P value of 0.000 which was less than the set significance level of 0.05. Null hypothesis was rejected. Therefore there was significant difference in default ratio between the two periods attributable to water bill payment via M-pesa. The correlation coefficient was -0.031 which implied a weak negative relationship i.e. an increase in M-pesa payment ratio led to a decrease in default ratio. Coefficient of determination (R<sup>2</sup>) of 0.56 (56%) implied that M-pesa usage for bill payment had 56% influence on reduced default ratio at NAWASSCO. The remaining 44% may be attributed to other components of working capital i.e. inventory and accounts payable.

### KEYWORDS

mobile banking, person-to-person (P2P) transfers, unbanked, under-banked, working capital.

### JEL CODE

MO0

## 1.0 INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

Effective management of accounts receivable presents important opportunities for organizations to achieve strategic advantage through improvements in customer service, cash management and reductions in costs. All organizations also have an objective of continually improving customer service. A large number of businesses are required to operate under a full or partial cost recovery arrangement. Effective accounts receivable management can assist organizations improve customer service through providing timely information on customer requirements and by making dealing with the organization as easy as possible. The primary objective of accounts receivable in commercial organizations is to collect monies due and to assist in meeting cash flow requirements. An effective accounts receivable function can assist in achieving the desired cash flow outcome through the timely collection of outstanding debts (Celent, 2007). Financial management functions such as accounts receivable have been traditionally viewed as transaction processing activities. Elimination or reduction of non-value tasks can be affected through better work practices and automation of processes. This can be achieved by analyzing current processes and redesigning them to remove as much manual intervention as possible, reducing rekeying and appraisal activities and minimizing operator error. An important part of this analysis is a formal, structured risk assessment which identifies and measures exposures associated with the accounts receivable process. Significant advances in accounts receivable performance and process efficiency are available to agencies through the following five complementary key management initiatives: Re-engineering accounts receivable, risk assessment, use of advanced technology, debt collection processes, and performance measurement. Technologies used include mobile money transfer in bill payment.

The objective of financial management is to maximize the shareholders wealth. So it is needed to generate sufficient profits. The profits generated depend mainly on sales volume. When the goods are being sold on credit as is the normal practice of business firms today to cope with increased competition, the sale of goods cannot be converted into cash instantly because of time lag between sales and realization of cash. As there is a time lag between sales and realization of receivables there is a need for sufficient working capital to deal with the problem which arises due to lack of immediate realization of cash against goods sold. The operating cycle is the length of time required for conversion of non-cash assets into cash. This operating cycle refers to the time taken for the conversion of cash into raw material, raw materials into work-in-progress, work-in-progress into finished goods, finished into receivables into cash and this cycle repeats. The operating cycle length differs from firm to firm. If a firm has lengthy production process or a firm has liberal credit policy the length of operating cycle will be more. On the other hand, if a firm does not extend credit or the firm is not a manufacturing concern i.e. where cash will be converted into inventory directly then the length of operating cycle will be reduced to a greater extent. The length of operating cycle can be calculated by calculating periods of raw material storage, work in process, finished goods storage and debtors collection period. Debtor Collection Period indicates the average time taken to collect trade debts. In other words, a reducing period of time is an indicator of increasing efficiency. It enables the enterprise to compare the real collection period with the

granted/theoretical credit period. Debtor Collection Period indicates the average time taken to collect trade debts i.e. reducing period of time is an indicator of increasing efficiency. It enables the enterprise to compare the real collection period with the granted or theoretical credit period.

Bill payments via MMT have been implemented by a number of deployments in the world, including Thailand's True Money, Pakistan's Easy Paise, and Ghana's MTN Mobile Money. Safaricom M-pesa is not being left behind the pack because it has already partnered with several organizations in the country to provide effective and efficient bill payment services. One of these organizations is NAWASSCO. The water company has been encouraging its customers to use M-pesa to clear the water bills since the year 2009

### 1.2 STATEMENT OF THE PROBLEM

For smooth running an enterprise, adequate amount of working capital is very essential. Efficiency helps to utilize fixed assets gainfully, to assure the firm's long-term success and to achieve the overall goal of maximization of the shareholders' funds. This creates an imperative to ensure the management of receivables is both efficient and effective. Developments in technology have permitted alternative functionalities for mobile handsets beyond the original communication function. Among these functions is Mobile Money Transfer. Mobile money is a key driver in the innovative landscape of management of accounts receivables by creating a platform for utility bill payment. High transaction costs incurred by customers through transport to payment points and burdensome paper-based billing processes for water service providers are key obstacles to efficient and secure revenue collection. Efficient revenue collection is one of several measures required to improve the operational performance of urban water utilities to achieve more sustainable and equitable approaches to serving the urban dwellers (Water Services Board, 2011). With the advent of mobile money transfers as a mode of paying bills, most organizations have welcomed and embraced the new innovation and the water boards are no exception. The study sought to analyze the effect of mobile money transfers on default ratio using the case of M-pesa at NAWASSCO. Most of these studies were conducted in developed countries and major cities thus may not reflect the impact on the success or failure of different business environments and in particular the MMT in a developing country like Kenya. The study aims at filling this information gap.

### 1.3 GENERAL OBJECTIVE OF THE STUDY

The main objective of the study was establishing the effect of mobile money transfer financial service on default using the case of M-pesa and NAWASSCO.

### 1.4 SPECIFIC OBJECTIVES OF THE STUDY

Specifically the study sought to address the following objectives;

- i. To determine the usage of M-pesa for payment water bills at NAWASSCO
- ii. To determine the effect of M-pesa usage for water bills payment on default ratio at NAWASSCO.
- iii. To determine the relationship between M-pesa payment ratio and default ratio

### 1.5 HYPOTHESES OF THE STUDY

- i. H<sub>0</sub>: The difference between default ratio in pre and post M-pesa period is not significant
- ii. H<sub>0</sub>: The relationship between M-pesa payment ratio and default ratio is not significant

### 1.6 SIGNIFICANCE OF STUDY

For policy makers and water boards, this study acts as an assessment of the various initiatives undertaken to help manage accounts receivable. This study gives NAWASSCO and other commercial organizations insight by providing an empirical study on how technology can help in the management of accounts receivable. MNOs (Mobile Network Operators) can be able to make an assessment of the sustainability of bill payment through MMT in relation to the substitutes that already exist in the market. The study will also contribute literature to the field of MMT and default in water bills that can be used by other scholars.

### 1.7 SCOPE OF THE STUDY

The study focused on establishing the effect of mobile money transfers on default ratio using a case of M-pesa at NAWASSCO. Only household clients use M-pesa for bill payment thus the focus. Safaricom's M-pesa mobile payment provider is the only one used at NAWASSCO. The study involved collecting secondary data from July 2007 to December 2011.

### 1.8 LIMITATIONS OF THE STUDY

The use of 24,724 domestic clients may have some limitations since it only captures the most active clients. However, this may not have a serious drawback as it gives a good representation of the domestic clients

The other limitation may arise from the specific statistical tests used in the study. For instance, the use of independent t test is unable to give exact effect of M-pesa on default rate. However, this doesn't invalidate its use in the study as correlation and regression analyses were further conducted.

## 2.0 RESEARCH METHODOLOGY

### 2.1 RESEARCH DESIGN

The study adopted a case study research design since it narrowed down intensively on the analysis of one individual researchable topic from a very broad field of research. This design was also suitable in describing usage of M-pesa payments and comparing default in the two periods of the study.

### 2.2 TARGET POPULATION OF THE STUDY

The target population was NAWASSCO's domestic clients who were 24,724. The study entirely focused on the domestic clients only. Corporate clients were not captured since they are not allowed to pay via M-pesa due to high amounts of their bills.

## 3.0 DATA AND DATA COLLECTION PROCEDURES

The researcher used a data capture sheets to collect secondary data for a period of four years (July 2007–December 2011). The researcher extracted the data from NAWASSCO's finance offices. Secondary data collected included the quantity of bills issued and paid monthly within the period. Data was divided into two samples representing two time periods i.e. from July 2007 to June 2009 and January 2010 to December 2011. The periods correspond to pre-M-pesa period and post-M-pesa period respectively. Data between July 2009 and December 2009 was not be used since it was the transition period around when NAWASSCO had rolled out the M-pesa bill payment system.

### 3.1 RELIABILITY AND VALIDITY OF THE INSTRUMENTS

Content validity of the research instrument was established in order to make sure that they reflected the content of the study concepts. The researcher scrutinized the instrument and compared its content with the set objectives to ensure that it contained all the information that addressed the study objectives. The instrument was then piloted at NAWASSCO before the main study to test its reliability. Piloting was essential to eliminate ambiguity in items, test data collection instructions, establish the feasibility of the study, anticipate and amend any logical and procedural difficulties regarding the study, and allow preliminary (dummy) data analysis (Kombo & Tromp, 2006).

### 3.2: DATA ANALYSIS AND PRESENTATION

Data collected was sorted and summed up to get the monthly totals. Default ratio, payment ratio, M-pesa payment ratio and debt collection period were calculated. Descriptive statistics were used to show usage of M-pesa at NAWASSCO. These included ratios and line graphs. Inferential statistics i.e. independent t test, correlation and regression analyses were used in testing hypotheses of the study.

## 4.0 RESULTS AND DISCUSSION

### 4.1 ANALYSIS OF THE USAGE OF M-PESA PAYMENTS AT NAWASSCO

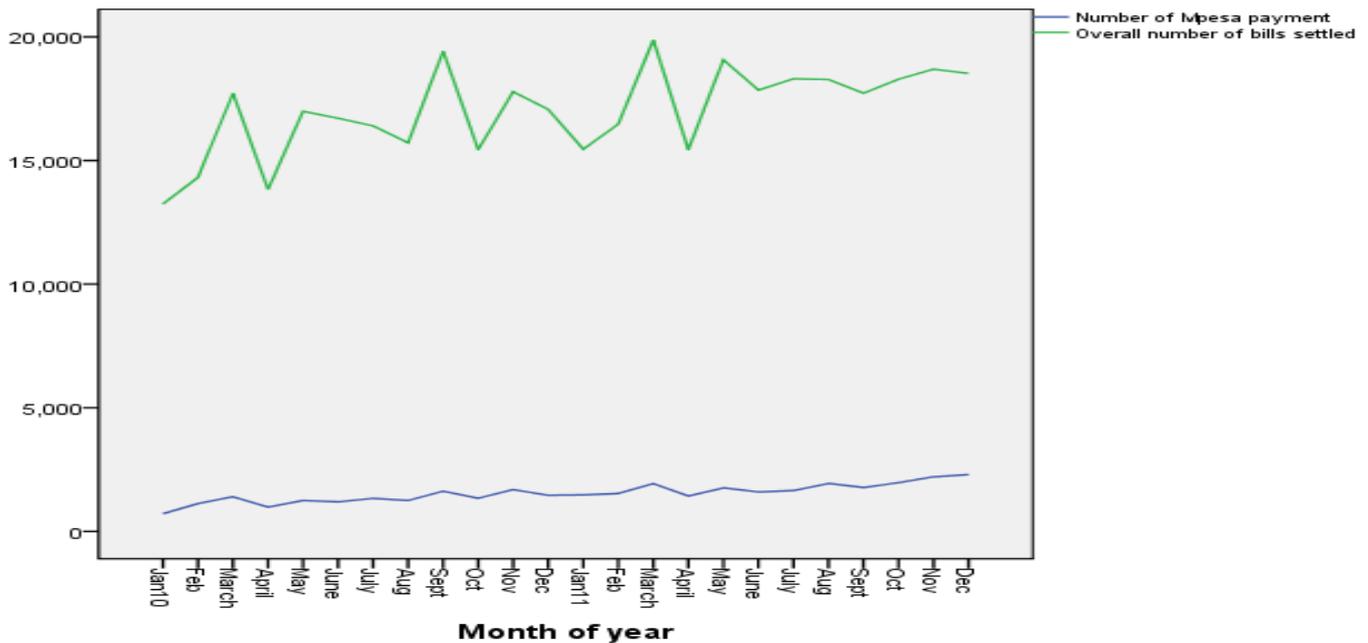
Line graphs were used to plot M-pesa payments against overall payments, number of M-pesa payments against number of cash payments, M-pesa amounts to overall amounts of the bills, M-pesa amounts to cash payments of the bills, number of M-pesa payments to number of bills due.

#### 4.1.1 COMPARISON OF NUMBER OF M-PESA PAYMENTS TO OVERALL PAYMENTS

From the graph below, the number of M-pesa payments increased steadily from January 2010 to December 2011 with lowest number in January 2010 and highest in December 2011 since it was still in infancy and thus less popular. Generally, the number of bills settled increased with the increasing number of bills

issued during the study period. The numbers of bills settled were at the lowest in December 2007 after which the number of bills settled generally increased reaching the peaks during July 2008, March 2010, September 2010 and April 2011. Generally, the number of bills settled increased with the increasing number of M-pesa payments during the study period as depicted in Graph 4.1.

GRAPH 4.1: A COMPARISON OF NUMBER OF M-PESA PAYMENTS TO OVERALL PAYMENTS

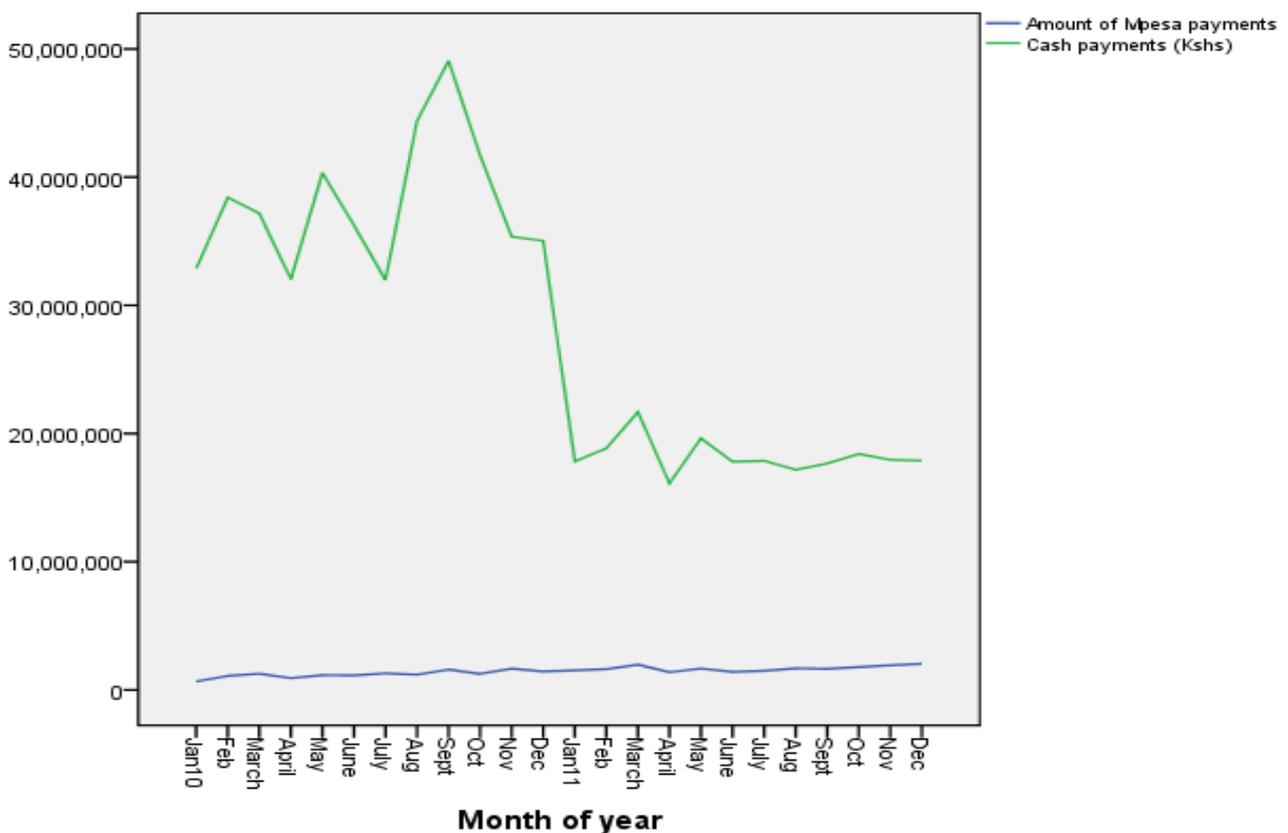


Source: Author 2013

4.1.2 COMPARISON OF M-PESA AMOUNTS TO CASH PAYMENTS OF THE BILLS

From Graph 4.2 below, cash amounts of bills (Kshs) settled fluctuated during the period reaching highest in September 2010, its lowest in April 2011 while remaining fairly constant from May 2011 to December 2011. Generally, the number of bills settled increased with the increasing number of M-pesa payments during the study period. The number of M-pesa payments increased steadily from January 2010 to December 2011 with lowest number in January 2010 and highest in December 2011. It may be observed that compared to cash amount of bills (Kshs) settled, the number of M-pesa payments were relatively small though increased steadily during the study period.

GRAPH 4.2: A COMPARISON OF M-PESA AMOUNTS TO CASH PAYMENTS OF THE BILLS

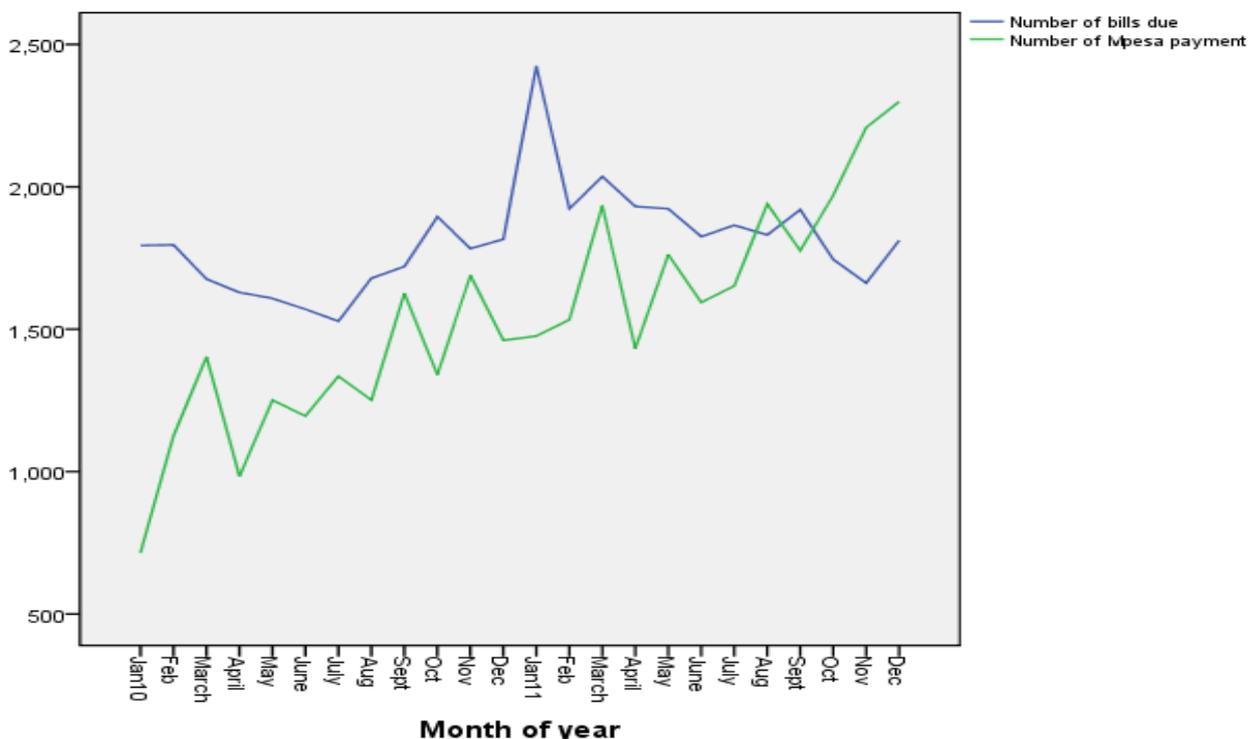


Source: Author 2013

4.1.3 COMPARISON OF NUMBER OF M-PESA PAYMENTS TO NUMBER OF BILLS DUE

From the graph below, the number of bills due fluctuated during the period reaching lowest in July 2010 and peaked in February 2011 while reduced gradually between March 2011 and November 2011. It is noticeable that the number of M-pesa payments increased steadily from January 2010 to December 2011 with lowest number in January 2010 and highest in December 2011. It may be observed that the periods that witnessed higher M-pesa payments generally coincided with reduced number of bills due such as March 2010, March 2011, September 2011 and November 2011. The intersections of the two curves explain that M-pesa exceeded bills due at those points and vice versa.

GRAPH 4.3: A COMPARISON OF NUMBER OF M-PESA PAYMENTS TO NUMBER OF BILLS DUE



Source: Author 2013

4.2 EFFECT OF M-PESA USAGE ON DEFAULT RATIO AT NAWASSCO

Debtor collection period was calculated yearly for both pre and post M-pesa periods. Default ratio in pre and post M-pesa periods was compared to each other using independent t test. This was followed by the testing of the relationship between M-pesa payments and default ratio using correlation and regression models.

4.2.1 DEBTOR COLLECTION PERIOD AT NAWASSCO

This was calculated using the formulae; Debtor Collection Period = (Average Debtors / Credit Sales) x 365. This was calculated yearly during the two sub periods of the study.

For Pre M-pesa period, debtor collection period was calculated as follows;

Year 1 (From July 2007 to June 2008);

Debtor Collection Period= 81,318,352/290,779,810\*365= 102.07 days (approximately 102 days)

Year 2 (From July 2008 to June 2009);

Debtor Collection Period= 60,996,740/266,943,008\*365= 83.4 days (approximately 83 days)

For post M-pesa period, debtor collection period was calculated the same as in pre M-pesa;

Year 1 Debtor Collection Period= 19,184,834/134,309,702\*365= 52.1 days (approximately 52 days)

Year 2 Debtor Collection Period= 26,114,906/214,482,220\*365= 44.44 days (approximately 44 days)

From the calculations above, debtor collection period was 102 and 83 days in year one and year two respectively during pre M-pesa period. Debtor collection period was 52 and 44 days in year one and year two respectively during post M-pesa period. Debt collection was slower in pre M-pesa period as compared to a faster debtor collection in post M-pesa. A long debtor's collection period is an indication of slow or late payments by debtors. This is attributed to measures that NAWASSCO took and the most prominent being bill payment through M-pesa. Debtor Collection Period enables the enterprise to compare the real collection period with the granted or theoretical credit period. Credit period at NAWASSCO is 14 days. Debtor collection period was 52 and 44 days in year one and year two respectively during post M-pesa period. Clearly this is reducing towards the 14 days credit period at NAWASSCO. This is attributed to M-pesa bill payments.

4.2.2 COMPARISON OF DEFAULT IN PRE M-PESA PERIOD TO DEFAULT IN POST M-PESA PERIOD

(H<sub>01</sub>) hypothesis one states there is no significant difference in default during the pre M-pesa period and Post M-pesa period. The hypothesis was tested using independent sample t-test. This was based on the assumptions that the two periods (pre-M-pesa and Post-M-pesa) represent two independent samples and that data was normally distributed.

From the table below, the mean of default for pre-M-pesa period (M = 14.6957) is greater than the post M-pesa period (M=7.5975). This implies that default ratio was much lower in the post M-pesa period as compared to pre M-pesa period.

TABLE 4.1: INDEPENDENT SAMPLE T-TEST OUTPUT FOR COMPARISON OF DEFAULT RATIOS

	Group	N	Mean	Std. Deviation	Std. Error Mean
Default	Pre-M-pesa Period	24	14.6957	3.90275	.79665
	Post-M-pesa Period	24	7.5975	.86168	.17589

Source: Author 2013

From the table below, the level of significance indicates that the observed difference in default during the pre-M-pesa period and post-M-pesa period is statistically significant since P value of 0.000 is less than significance level of 0.05. Therefore decision rule is to reject null hypothesis; therefore there is significant difference in default ratio between the two periods attributable to M-pesa payment.

TABLE 4.2: INDEPENDENT SAMPLES TEST RESULTS FOR COMPARISON OF DEFAULT RATIOS

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Default Ratio	Equal variances assumed	35.526	.000	8.701	46	.000	7.09816	.81583	5.45598	8.74035
	Equal variances not assumed			8.701	25.237	.000	7.09816	.81583	5.41872	8.77760

Source: Author 2013

4.3 RELATIONSHIP BETWEEN M-PESA PAYMENTS AND DEFAULT RATIO

H02: There is no significant relationship between M-pesa payments and default ratio. Correlation and regression analyses were conducted separately to test this hypothesis.

A two-tailed correlation analysis was conducted at 5% level of significance. A two tailed analysis was chosen because the study tested the possibility of the relationship in both directions i.e. study is looking for either an increase or a decrease.

From the table below, it is observed that relationship (r=-0.031) is a weak negative relationship. This implies that an increase in M-pesa payments leads to a decrease in default ratio and a decrease in M-pesa payments leads to an increase in default ratio.

Calculated P-value of 0.885 is greater than significance level of 0.05 thus accept H02 which states that there is no significant relationship between M-pesa payments and default ratio during post M-pesa period i.e. relationship is not statistically significant.

TABLE 4.3: CORRELATION ANALYSIS FOR RELATIONSHIP BETWEEN M-PESA PAYMENTS AND DEFAULT RATIO

Correlations			
		Number of M-pesa payment	Disconnection Ratio
Number of M-pesa payment	Pearson Correlation (r)	1	-.031
	Sig. (2-tailed)		.885
	N	24	24
Default Ratio	Pearson Correlation (r)	-.031	1
	Sig. (2-tailed)	.885	
	N	24	24

Source: Author 2013

Regression analysis was done to calculate the relationship by computing the amount of influence the independent variable had on the dependent variable at 5% significance level.

From the tables below, coefficient of determination (R<sup>2</sup>) is 0.560 (56.0%). P value of 0 .000 is less than significance level of 0.05 so reject H0; therefore the relationship between M-pesa payments and default ratio is statistically significant. It is hereby concluded that M-pesa payments influence default ratio by 56.0%. The remaining 44% influence is attributed to other components of working capital i.e. cash and inventory.

TABLE 4.4: RELATIONSHIP BETWEEN M-PESA PAYMENTS AND DEFAULT RATIO

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.749 <sup>a</sup>	.560	.551	3.04819	.560	58.613	1	46	.000

Source: Author 2013

The reason for the difference in P values of correlation and regression analysis is because the two methods are technically different from each other. Correlation computes the value of the Carl Pearson correlation coefficient (r) while regression quantifies goodness of fit with Coefficient of Determination (R<sup>2</sup>).

5.0 CONCLUSIONS AND RECOMENDATIONS

5.1 SUMMARY OF THE FINDINGS

NAWASSCO initiated M-pesa in June 2009. The objective of this initiative was to improve revenue collection through increasing payment ratio and reducing default in water bills, making payment convenient to customers, and intention of 'going green' by reducing massive paperwork involved in processing over the counter transactions. This study sought to establish the effect of M-pesa usage on default ratio.

First, line graphs were sketched to show the usage of M-pesa water bill payments at NAWASSCO. This analysis showed that M-pesa picked a steady upward usage throughout the study period. This means that bill payment through M-pesa increased over the entire period.

Secondly, debtor collection period was calculated for both pre M-pesa period and post M-pesa period. Debtor collection period was 102 and 83 days in year one and year two respectively during pre M-pesa period. Debtor collection period was 52 and 44 days in year one and year two respectively during post M-pesa period. Debt collection was slower in pre M-pesa period as compared to a faster debtor collection in post M-pesa. A long debtor's collection period is an indication of slow or late payments by debtors. This is attributed to measures that NAWASSCO took and the most prominent being bill payment through M-pesa. Debtor Collection Period enables the enterprise to compare the real collection period with the granted or theoretical credit period. Credit period at NAWASSCO is 14 days. Debtor collection period was 52 and 44 days in year one and year two respectively during post M-pesa period. This is reducing towards the 14 days credit period. This is attributed to M-pesa bill payments.

A test of significance was carried out to test whether the introduction of M-pesa had an effect on the default ratio. This was done using independent t test. The level of significance indicates that the observed difference in default during the pre-M-pesa period and post-M-pesa period is statistically significant since P value of 0.000 is less than significance level of 0.05. Therefore decision rule was to reject null hypothesis; therefore there was significant difference in default ratio between the two periods attributable to water bill payment via M-pesa.

Thirdly, correlation and regression analyses were conducted to describe the relationship between MMT usage and default ratio. The correlation coefficient was - 0.031 which implied a weak negative relationship. Therefore an increase in M-pesa payment ratio led to a decrease in default ratio. Coefficient of determination (R<sup>2</sup>) of 0.56 (56%) implied that M-pesa usage for bill payment had 56% influence on reduced default ratio at NAWASSCO. The remaining 44% is attributed to other components of working capital i.e. inventory and accounts payable.

5.2 CONCLUSIONS

The study sought to determine the effect of M-pesa on payment default of water bills at NAWASSCO. From the results of a time series analysis, M-pesa payment picked an upward usage over the period. An independent t test result showed there was sufficient evidence to conclude that default in the pre M-pesa period is greater than default in the post M-pesa period. In general, the results reveal that the introduction of M-pesa at NAWASSCO has reduced default ratio of water bills; M-pesa has reduced default ratio by 56%. This is beyond 50% mark after only two years in use. These results echo the findings by Hope et al, (2011). According to their study, effect of MMT on bill payment is usually low in the first two to three years of operation due to barriers like alternative pay points, delayed reconciliation, limited awareness, physical proof of payment and high transaction tariffs.

Mobile water payment systems present a promising tool that can meet the needs of water users, WSPs and MNOs. This revenue collection mechanism can also assist WSPs in their efforts to achieve their twin goals of financial and operational sustainability. At the same time, MNOs can further their commercial objectives by driving revenues and retaining subscribers through proper management of debt and reduced water meter disconnections respectively. Work is now needed to improve the uptake of M-pesa water bill payment at NAWASSCO.

### 5.3 RECOMMENDATIONS

Usage analysis showed M-pesa picked a steady upward usage throughout the study period. This means that bill payment through M-pesa increased over the entire period. More awareness through intensive marketing campaigns could make M-pesa more popular and thus drive the usage higher.

Debt collection was slower in pre M-pesa period as compared to a faster debtor collection in post M-pesa. There was significant difference in default ratio between the pre and post M-pesa periods. Stringent credit policy should be adopted to reduce debtor collection period. For example reduction of 14 day grace period could lower debtor collection period at NAWASSCO.

An increase in M-pesa payment ratio led to a decrease in default ratio. M-pesa usage for bill payment influenced default ratio by 56% at NAWASSCO. Other mobile money transfer systems apart from M-pesa could be made available for clients at NAWASSCO.

### 5.4 POSSIBLE AREAS FOR FURTHER RESEARCH

This research only evaluated the effect of M-pesa on default. In future studies can be done on effect of M-pesa on default at NAWASSCO or other service providers using longer comparison periods e.g. data on 5 years pre M-pesa and 5 years post M-pesa as opposed to the 2 years apiece used in this study.

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**IMPACT OF CORPORATE GOVERNANCE ON CORPORATE REPUTATION**

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**ABSTRACT**

*The Paper deals with Impact of corporate governance on corporate reputation. The aim of this paper is to show that corporate governance factor influence on corporate reputation and to test the relation between corporate governance and corporate reputation. The results have direct implications for the management of corporate governance mechanisms by shareholders which should take into account its role in the creation and maintenance of corporate reputation. The research explains, the necessity for Better Corporate Governance to enhance the Corporate Reputation. The Main reason for the study shows the Impact of corporate governance affects corporate reputation development.*

**KEYWORDS**

corporate governance, corporate reputation.

**INTRODUCTION**

Corporate governance mechanisms seek to protect investors and maximization of corporate value, as well as increasing confidence on capital markets. Previous empirical research has investigated corporate governance relationship with information quality, earnings management or internal controls (Klein, 2002; Cohen et al., 2004; Davila & Peñalva, 2006). According to Monterrey Mayoral & Sánchez Segura (2008), corporate governance practices are appropriately designed, it will guarantee the integrity of the accounting function, which is essential to avoid earnings management. Both academics and regulators have claim for the need of improving corporate governance controls. The corporate governance mechanisms seek to enhance confidence on capital markets, companies will have incentives to improve them voluntarily. It is expected that companies should have better governance practices, a better image and are more valued in terms of reputation. Reputation builds competitive advantage (Weigelt & Camerer, 1988; Fombrun & Shanley, 1990; Hall, 1993) and improves financial performance (Roberts & Dowling, 2002; Fernández & Luna, 2007). Several authors have pointed out that the ultimate responsibility for the achievement and maintenance of a good reputation lies on the Board of Directors and the CEO (Kitchen & Laurence, 2003; Dowling, 2004; Tonello, 2007). Reputation is the most important aspects of banks as a study intend to understand the factors affects the reputation of the bank. The research intend to study the some key factors of the corporate reputation. The objective of this paper is to test the Impact of Corporate Governance on Corporate Reputation.

**REVIEW OF LITERATURE**

A company achieves its competitive advantage when it succeeds to implement the strategy of value creation which is not possessed by its competitors on the market or in the industry. The sustainable competitive advantage may be achieved by disposing mechanisms that protect their competitive advantage from imitation. The established sustainable competitive advantage is the basis for the realization of superior organizational performance, survival and development. The theory of strategic management suggests that positive reputation may create competitive advantage and influence corporate performance. Market efficiency determines the role of corporate reputation, and on an efficient market, the reputation plays the role of strategic property. There is a problem of identifying strategic resources in comparison to non-strategic ones, therefore it is best to say that strategies resources are the ones that significantly contribute to creating sustainable competitive advantages. According to Fombrun corporate reputation consists of four characteristics credibility, reliability, responsibility and trustworthiness (Fombrun 1996).

Harrison argues that organizations recognize the significance of corporate reputation in business goals achievements and in the function of competitive advantage maintenance. The corporate reputation is a part of company's assets along with tangible property, in balance sheet, workforce, social property (relations with suppliers, relations with consumers, local community and regulative institutions), and environmental property (energy, material resources, clean water, air and local environment; see Harrison 2007).

According to Widerman and Buxel (2005), corporate reputation helps the companies to get good employees, attract consumers, and increase consumers' loyalty, which may be implemented as a factor of competitive performance and useful in obtaining the capital. Without good reputation it is very difficult for a company to survive or to make progress. The key role of corporate governance has to be the improvement and protection of corporate reputation.

Kitchen and Laurence (2003) have proven that reputation of a CEO and reputation of a company are linked to each other. Good reputation is impossible to maintain without internal organization support.

Argenti and Druckenmiller, 2004 define corporate reputation as 'a collective presentation of all participants image, built through the time and based on programs of company identity, its performance and perceptions of its behaviour'.

Good reputation comes when consumers prefer the products and services of a company to available products of the competition that are similar in prices and quality. Good reputation is the key condition of stakeholders' support to a company in competitive relations, and it is an important factor of value of organization on the financial markets. In spite of being intangible, the researches show that reputation provides sustainable competitive advantage. Corporate reputation may be divided by following factors. These are company's ethics, employees, financial performance, leadership, management, social responsibility, and focus on consumers, quality, reliability, emotional appeal, and communication. (Barnett, Jermier, and Lafferty (2006)

Corporate reputation includes basic components, such as image and Identity. Identity is determined as a perception of the company's nature by its employees and managers; the image is a perception of external parameters of the company. Reputation of corporation may be observed in the sphere of awareness (image and perceptions) Building Corporate Reputation through Corporate Governance includes general awareness of stakeholders, without judgments. Stakeholders are included in the evaluation of company status (expectations and opinions). At the end, reputation is observed as a property that consider it as something valuable and important for a company are incorporated. Company identity consists of characteristics which are considered by employees to be of a central significance for a company because they make a company unique in comparison to other companies, and at the same different to some permanent characteristics that link the past and present to the future of a company (Cornelissen and Harris 2001).

Besides that, the image is very important in the process of shaping consumers' expectations and for better perception of service quality. The image is a filter that affects the perception of company service operations. Positive image of an organisation with a perfect service that communicates clear values leads to positive attitudes of employees fall. This enables a company to attract such workforce that might be in short supply on the labour market. Good and recognisable image does not happen by chance. In order to build it, the procedure requires creativity and firm determination of corporate management.

Corporate image and corporate reputation management have two primary aims. The first is the creation of 'the intentional image' in the minds of all key constituents in a company. This means creating a widespread name recognition between target stakeholders, accompanied by spontaneous identification. The second aim in the managing process is the creation of positive reputation in the minds of key stakeholders. A prominent corporate image may be developed through coordinate image building campaign. This includes a formal communication system: name, logo, corporate advertising and public relations. On the other side, building a good reputation requires more than effective communication efforts. It demands extraordinary identity that can be modelled only by consistent performance throughout many years. Coordinated communication programs can, however, strengthen and improve company's reputation. Company competitive advantage depends on its distinctive capabilities, strategic Excellency and market structure.

Improvements of information transparency may be a good way of raising reputation and regaining trust. New corporations try to build up their reputation with the intention to avoid being labelled as untrustworthy by shareholders and stakeholders. Reputation, dialogue and experience are the basis for trust (Swift 2001).

Therefore the intention of reputation management strategy is to give more information consistent to corporate activities within reasonable time. Good reputation is the result of consistent informative signal within a certain period of time. Some management tasks linked to reputation are: transparency, solutions for the problems of signal misperception, and the emission of consistent information, and prevention of moral hazards that might undermine building and maintaining good reputation. (Dentchev and Hene 2003).

Gillan and Starks (2003) point out that financial institutional investors like investment companies may play active role whereas banks and insurance companies, as traditional institutional investors may play a passive role in monitoring. Corporate reputation may be strengthened by a program of relations with consumers – a research with the aim to know key stakeholders, to measure their strengths and weaknesses, and fill in the gap between internal reality and stakeholders' perception.

State shareholders have a primary goal announced in state participation in company operations, based on strategic significance. By state participation and state ownership we get greater openness, which is positive for transparency. Since managers may also be the owners of the shares in companies in which they work as managers, greater participation of managerial ownership may lead to defeating the monitoring mechanism. There are several aspects that are linked to company reputation, and that should be managed by the management. These are, according to Persey et al. 2004). The ability to make dialogue that helps a manager to make cooperative relations with a great range of external participants which are based on trust. Secondly, there is the capability of avoiding critical reputation dangers like corporate silence. Thirdly, there is the capability that allows managers to influence external officials (advocacy). Last but not least let us mention the capability of crisis communication that enables managers to interact with influential participants in unpleasant conditions a company may find itself in (Purseley et al. 2004).

**Conceptual Frame work:** Figure 1 shows the theoretical frame work of study by depicting the influence of corporate governance on Corporate Reputation. This frame works indicates corporate governance as Independent variable and corporate reputation as dependent variable. Transparency, Accountability, Fairness, Social Awareness, Discipline, Independence and responsibility are dimensions to measure the corporate governance as a construct variable.

FIGURE 1: CONCEPTUAL FRAME WORK OF STUDY



**DATA AND METHODOLOGY**

**DATA**

Questionnaire to measure the corporate governance and corporate reputation have been adopted from CLSA 1 (37 Items). And the Reputation Quotient ( RQ ) 2 (20 items ) scale adopted from Fombrun et.al 2000 . This study uses five point and seven Point scale Likert scale questionnaire respectively, it carried from "strongly disagree" toward "strongly agree" with number "1" to "5" for Governance and 1 to 7 for Reputation quotient, as instrument for data collection. The Instrument used to measure the factors influence corporate governance and Measure corporate reputation.

1. This questionnaire has been adopted form Credit Lyonnais Securities Asia (CLSA) to measure the corporate governance. Further it is amended according to the situation. This research is not using exact questionnaire but in amended form

2. Fombrun, C. J., Gardberg, N. A., Sever, J. M. (2000). The Reputation Quotient: A multi takeholder measure of corporate reputation.

The researcher collected data from banking and Finance professionals working in Chennai. Chennai is the third largest city of India and is considered the Key locations of finance activities. Research focuses more on the importance of sample size because it is critical and vital in obtaining the sufficient statistical outputs. Normality of data and estimation methods both require a standard minimum sample size which is recommended to be 10 participants for each parameter (Schreiber et al. 2006). (Sivo et al, 2006), Garver and Mentzer (1999), and Hoelter, D. R. (1983) This research study is consisted of 550 respondents from the total 600 distributed.

This study use the Principle components Method (PCM) to measure factors from different items on each construct like good corporate governance and Corporate Reputation with respect to their reliable scales. To get the optimal weight from each variable related to a factor PCA has been for this study in form to get linear combination of observed variable related to a factor.

$$PC = a_1(X_1) + a_2(X_2) + \dots + a_n(X_n)$$

eq. 1 where PC = principle component an = Regression weight for observed variable n Xn = Subject’s corresponding score on observed variable n.

Varimax method has been used in this study to get components. To check the sampling adequacy for data analysis Kaiser-Meyer –Olkin (KMO) test has been used. This study also use Bartlett’s test of sphericity to insure whether data used in this study is ample or not. Principle component is retained by using KMO criterion. This research is using factor loading in order to check that how much a variable loads into its corresponding factor. Reliability is measured through value of Cronbach’s alpha for all scales which suggest that its value should be greater than .60 in order to get internal consistency. Regression analysis is employed to find out the impact of corporate governance on corporate reputation among banking investor and customer in Chennai

**ANALYSIS**

Corporate governance and Corporate Reputation is measured with help of 37 and 20 questionnaires respectively for each construct variable in this study. whereas Cronbach’s alpha test is used to determine the reliability and inter item consistency of the constructs used in the present study i.e. corporate governance and corporate reputation. Table 1.1 depicts that values of Cronbach’s alpha for Corporate Reputation, discipline, transparency, Independence, Accountability, Responsibility, Fairness and social awareness are .951, .789, .818, .866, .737, .661, .864, .788 for each respectively.

**TABLE 1.1: RELIABILITY OF MEASUREMENT**

Construct	Valid N	Numbers of Items	Cronbach’s Alpha
Discipline	550	5	.789
Transparency	550	6	.818
Independence	550	6	.866
Accountability	550	5	.737
Responsibility	550	4	.661
Fairness	550	7	.864
Social awareness	550	4	.788
Corporate Reputation	550	20	.951

PCM is used for factor analysis with help of Varimax rotation method to assure construct validity. Principle components method result is shown in table 1.2, 1.3, KMO and Bartlett’s are used to measure sampling adequacy test whether the adequacy of data is applicable for factor analysis or not. Table 1.2 represents the results of KMO and Bartlett’s tests which shows that our data were sufficient for factor analysis. Values of KMO for Corporate Reputation, Discipline, transparency, Independence, accountability, Responsibility, fairness and social awareness are .933, .812, .849, .868, .751, .679, .767 correspondingly. Values ranging from .6 to .9 show KMO’s value are good to superb (Hutcheson and Sofronie, 1999). Relationship between two construct variables is investigated by Bartlett’s test. Factor analysis can be conducted if items of a construct are mutually related to each other.

**TABLE 1.2: KMO AND BARTLETT’S TEST**

Construct	No. of Items	KMO Measure of Sample adequacy	Bartlett’s Test of Sphericity Chi-Square	Bartlett’s Test of Sphericity Sig.
Discipline	5	0.812	757.592	0.000
Transparency	6	0.849	1017.863	0.000
Independence	6	0.868	1446.624	0.000
Accountability	5	0.751	852.237	0.000
Responsibility	4	0.679	316.997	0.000
Fairness	7	0.853	1673.517	0.000
Social awareness	4	0.767	624.554	0.000
Reputation	20	0.933	8673.446	0.000

To study that how each item is loaded into its relevant principal component we use table 1.3 for the factor loading of each item. Straub et al (2004) suggest us that value of each item in factor loading should be at least 0.40 into it relative principle component.



TABLE 1.3: FACTOR LOADINGS

Variable	Item	Factor Loading
Discipline	Company has issued a "mission statement" that explicitly places a priority on Good Corporate governance	0.661
	Senior Management sticks to clearly defined core businesses, No diversification into an unrelated area in last 3 years.	0.737
	Over the past 5 years, it is true that the company has not declared any warrants against trespassers.	0.714
	Over the past 5 years, it is true that the company has not built up disciplinary action report.	0.830
	Company's Annual Report includes a section devoted to the company's performance in implementing corporate governance principles.	0.752
Transparency	Management has disclosed three or five-year performance report.	0.660
	Public announcement of results are available have been no longer than two working days of board meeting.	0.716
	The reports are clear and informative.(Based on perception of analyst.)	0.669
	Company consistently discloses major and market sensitive Information punctually.	0.830
	Analysts have good access to senior management. Good access implies accessibility soon after results are announced and timely meetings where analyst are given all relevant information and are not misled.	0.751
	Company has an English language web-site where results and other announcements are updated promptly (no later than one business day).	0.727
Independence	The chairman is an independent, non-executive director.	0.796
	Company has an executive or management committee which is substantially different from members of the board and not believed to be dominated by referrals.	0.840
	Company has an audit committee. it is chaired by a perceived genuine independent director.	0.764
	Company has a remuneration committee. It is chaired by a perceived genuine independent director.	0.840
	External auditors of the company are in other respects seen to be completely unrelated to the company.	0.611
	The board includes no direct representatives of banks and other large creditors of the company. (having any representatives is a negative.)	0.774
Accountability	The board members and members of the executive/management committee substantially different. (i.e. no more than half of one committee sits on the other.)	0.604
	There are any foreign nationals on the board.	0.844
	Full board meetings are held at least once a quarter.	0.855
	Audit committee nominates and conducts a proper review the work of external auditors.	0.055
	The audit committee supervises internal audit and accounting procedures.	0.871
Responsibility	The board/senior management have made decisions in the recent years seen to benefit them at the expense of management, has the company been seen as acting effectively against individuals responsible and corrected such behaviour promptly, i.e. within 6 months	0.726
	Over the past five years, there were open business failures or misbehaviour; responsible persons were appropriately and voluntarily punished.	0.742
	There is any controversy or questions over whether the board and/or senior management take measures to safeguard the interests of all and not just the dominate employees.	0.730
	There are mechanisms to allow punishment of the executive/management committee in the event of mismanagement.	0.613
Fairness	It is true that there have not been any controversy or questions raised over any decisions by senior management in the past 5 years where upper management are believed to have gained at the expense of middle or lower management.	0.789
	All the employees have the access to their appraisal record.	0.806
	Criticism/suggestions methods are easily available to all stake holders / employees.	0.766
	All necessary information for appraisal criteria are made available prior to evaluation	0.818
	It is true that there have been no questions or perceived controversy over whether the company has issued transparency report or not.	0.629
	Over the past five years, it is true that total director's remuneration has not increased faster than employees	0.784
	Over the past five years, it is true that total director's remuneration has not increased faster than employees.	0.595
Social Awareness	Company has an explicit (clearly worded) public policy statement that emphasizes strict ethical behaviour: i.e. one that looks at the spirit and not just the letter of the law.	0.702
	Company has a policy/culture that prohibits the employment of the under-aged.	0.786
	Company has an explicit equal employment policy.	0.823
	Company is explicitly environmentally conscious	0.811
Corporate Reputation	I have a good feeling about this Bank	0.606
	I admire and respect this Bank	0.551
	I trust this bank	0.554
	This Bank stands behind its Products and services	0.585
	This Bank develops innovative products and services	0.497
	This Bank offers high Quality products and services	0.568
	This Bank offers products and services that are a good value for money	0.530
	This Bank has excellent Leadership	0.777
	This bank has clear vision for its future	0.832
	This Bank recognize and takes advantage of market opportunities	0.777
	This bank is well Managed	0.811
	This Bank looks like good bank to work with	0.836
	This bank looks like that would have a good employees	0.834
	This Bank supports Good cause	0.838
	This Bank is an environmentally responsible bank	0.795
	This Bank maintains high standards in the way its treats People	0.797
	This Bank has strong record of profitability	0.776
	This Bank Looks like a Low risk Investment	0.746
	This Bank tends to outperform its Competitors	0.791
This Bank looks like with strong prospects for the future growth.	0.803	

TABLE 1.4: REGRESSION ANALYSIS (Corporate Reputation)

Variable	Coefficient	Standard Error	t-Ratio
Constant	0.968	0.178	9.584
Discipline	0.995	0.029	34.737
Transparency	0.581	0.063	12.352
Independence	0.568	0.060	10.976
Accountability	0.597	0.051	11.706
Responsibility	0.529	0.079	10.769
Fairness	0.379	0.101	3.745
Social awareness	0.502	0.078	10.046

Tables 1.4 shows the results of regression analysis. Impact of corporate governance on Corporate Reputation is significant. The regression analysis shows that the effect of discipline, fairness, Transparency, accountability, Responsibility and Social Awareness is higher than discipline variable with values of .379 to .597 each respectively.

TABLE 1.5: STATISTICS ON CORPORATE REPUTATION

R2	Adj. R2	F-statistics	Prob. (F-statistics)
0.839	0.704	481.189	0.0000

However and discipline have significant effect on Corporate Reputation as individuals. Value of adjusted R2 (.704) shows that the corporate governance related to Fairness And Transparency, discipline, Accountability, independence, and Social awareness, shows 70 % effect on Corporate reputation. F test (F-statistics= 481.189), P= 0.000 shows that our model of corporate governance and Corporate Reputation is good fit because effect of independent variables is jointly significant.

## LIMITATIONS

The resources and time are the reasons for a limited number of respondent included in the research sample. In future researches it is necessary to make a detailed study using more scientific and effective means, such as Nationalised Bank, NBFC's and International Banks for discussions.

## CONCLUSIONS

From the research high level of awareness and responsibility in recognising the role of corporate governance and the significance of integration of corporate governance into corporate strategy. Companies do fully understand that better corporate governance is a condition for corporate reputation development. Companies do completely understand the nature and significance of corporate reputation and its key role in the achieving sustainable competitive advantage. The role of corporate reputation should be of the utmost importance in increasing the numbers of investors. Though the majority of companies and consumers share the opinion that companies are liable to disclose their internal corporate information to public, the discipline, Fairness & transparency has strong governance control are recognised as significant factors in corporate reputation.

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**ANALYSING THE GLOBAL IMPACT OF VOLATILITY ON THE INDIAN STOCK MARKET**

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**ABSTRACT**

*In this research paper, researchers investigate the impact of volatility of various major global stock markets on Indian stock market. Researchers studied volatility of each indices of market of India, Brazil, England, United States and, Hong Kong from 01<sup>st</sup> April 1997 to 31<sup>st</sup> March 2015. It is observed that developed markets seem to be less volatile compared to the emerging markets. One can easily understand that any fractional change in developed markets will have an impact on developing markets as well. This happens because of presence of conditional variance. As per the findings, since the last decade Indian market especially National stock exchange has shown high volatility. Obviously, there are impacts of both external and internal factors on the market; as a result there is asymmetric volatility. In this paper four indices which are the external factors have been taken into consideration to find out volatility impact on Indian market. Here in the paper researchers took ARCH test into consideration to estimate expected returns. In concluding remark after applying the ARCH test, researcher established there is less impact of volatility on Indian stock market. BOVESPA has little bit more impact compared to the remaining three markets. If it is asked to arrange maximum to minimum of impact of volatility on Indian market, the sequence will be BOVESPA, Hang Seng, NASDAQ Composite and FTSE.*

**KEYWORDS**

Indian stock market, global impact.

**INTRODUCTION**

**W**hen there is volatility in the market investors and associated panic, which should be avoided. Be relaxed and keep stocking up equity assets. The word risk is mainly considered as the probability of loss in an asset class and in financial terms risk is usually witnessed as volatility in an asset class in relation to volatility in other asset classes. Hence, the greater the volatility, the riskier the security will be.

According to many researchers, equity is considered to be the most risky asset class, but on the other hand it is the best method to generate returns in the long term. Why is equity market considered to be a risky asset class? The answer to this question lies in the understanding of volatility. As we are aware of the fact that equities are traded on daily basis in the stock market by millions of investors as well as by foreign and domestic institutions. These day-traders are very aggressive and thus generate movements in stock market.

Warren Buffett in his 2014 annual letter to shareholders has explained the concept of volatility and risk "Stock prices will always be far more volatile than cash equivalent holdings. Over the long-term, however currency-denominated instruments are riskier investments far riskier than widely diversified stock portfolios that are bought over time and that are owned in a manner invoking only token fees and commissions. That lesson has not customarily been taught in business school, where volatility is almost universally used as a proxy for risk. Though this pedagogic teaching, it is dead wrong: Volatility is far from synonymous with risk." Thus volatility is a characteristic of equity, but it does not mean risk as many people misunderstand it. The fact is, the investors can reduce risk in their portfolio by purchasing stocks at lower prices, at the time when volatility plays out in the market.

**LITERATURE REVIEW**

Batra Amita<sup>1</sup> (2004), conducted research on Stock return volatility pattern in India, by observing the time varying pattern of stock return volatility in India during 1979-2003. The study revealed that the stock market cycles had dampened in the recent past. Volatility had reduced in the post liberalization period for both the bull and bear phase of the stock market cycle.

Pandian & Jeyanthi<sup>2</sup> (2008) in their study on "Stock volatility in Indian stock exchange" concluded that "The outlook for India is remarkably good" & "In the bull phases volatilities were lower than bear phases".

Kumar Brajesh & Singh Priyanka<sup>3</sup> (2008) in their research on "Volatility modelling, seasonality and risk return market" found that Indian commodity and stock market returns show persistence in volatility, clustering and asymmetric properties.

Kumar Rakesh & Dhankar Raj S.<sup>4</sup> (2009) in their investigation on "Asymmetric Volatility and Cross Correlations in Stock Returns under Risk and Uncertainty" rejected the relationship between stock returns and expected volatility. However, the relationship was significant with unexpected volatility. It brought out that investors adjust their risk premium for expected variations in stock prices, but they expect extra risk premium for unexpected variations.

Mishra P. K.<sup>5</sup> (2009) conducted study on "Capital market volatility - An Econometric Analysis". The purpose of the paper was to examine the volatility of Indian capital market amidst scepticism of recession. The paper drew heavily on ARCH class models from the literature of time series econometrics to study fat tails, volatility clustering, leverage effects and persistence of stock market volatility in India. The results provided evidence of time varying volatility; it's asymmetric and leverage effects.

Joshi Prashant<sup>6</sup> (2010), in his study on "Modelling volatility in emerging stock markets of India and China" suggested that the volatility is more persistent in the Chinese stock market than the Indian stock market.

Venkatesh C. K. and Tyagi Madhu<sup>7</sup> (2010), in their research on "The use of fundamental and technical analysis by stock exchanges dealers: Indian evidence" concluded that the dilemma faced by the market participants in the secondary market so as to predict the movement of stock prices is well-managed using two approaches, Fundamental and Technical analysis. Due to high volatility in the stock markets, it is considered as a very rigorous job to predict the future movement of the stock prices. The paper tried to answer to the question as to which of the two tools should be used, fundamental or technical analysis.

Raunig Bukhard and Scharler Johan<sup>8</sup> (2010) in their investigation on "Stock market volatility and the business cycle" concluded that increased volatility would result in higher uncertainty about future economic conditions. The increase in uncertainty would lead to low consumption and investment spending and low demand as well. Empirical evidence suggested that this indirect channel through which Stock market developments feed back into the real economy is quantitatively important.

Mallikarjunappa T & Afsal E M<sup>9</sup> (2010) in their study "Price Discovery Process Volatility Spill-over in Spot & Futures Market: Evidences of Individual Stocks" concluded that Volatility spill-over from spot market to futures market is present in such a way that a decrease in spot volatility leads to a decrease in futures volatility. They also found that volatility shocks are asymmetric and persistent in both the markets.

Shobhana V. K. & Karpagavalli R.<sup>10</sup> (2011), in their study on "Volatility of Stock Return of the Select Banking Companies Listed at Bombay Stock Exchange" examined the volatility of stock return of each of the select banks and that of the groups with the market return and the riskiness of the securities.

## RESEARCH METHODOLOGY

The purpose of research is to increase knowledge about a specific area by discovering answers to questions through the application of scientific procedures. The researcher finds out facts which were hidden and were not discovered.

### 1. DATA COLLECTION

The data for the study will be collected from the official stock market websites of the five selected markets, which are India, USA, England, Hong Kong and Brazil. The study will be based on the major stock market indices of these five countries, viz S&P CNX Nifty, NASDAQ Composite, FTSE 100, Hang Seng and BOVESPA. The span of the study was around 216 months from 01<sup>st</sup> April 1997 to 31<sup>st</sup> March 2015, which comprises of a total of approximate 4,502 observations for each of the index.<sup>11</sup> To calculate the daily return value, the daily mean index value was generated from the four reported figures of the day, which were the daily open, high, low, close values. Further the natural log of daily mean index value will be used to generate the daily return. Following is the formula:

$$R_t = \ln[I_t/I_{t-1}]$$

Where  $R_t$  = return on day 't'

$I_t$  = index mean value on day 't'

$I_{t-1}$  = index mean value on day 't-1'

Volatility can be described as the degree of variation that takes place in the market price of a financial instrument. "The annualized volatility  $\sigma$  is the standard deviation of the instrument's yearly logarithmic returns."<sup>12</sup>

The generalized volatility  $\sigma_T$  for time period  $T$  in years is given below:

$$\sigma_T = \sigma \sqrt{T}.$$

### 2. OBJECTIVES

- To analyse the global impact of volatility on NSE
- To verify stationarity using appropriate model.
- To frame appropriate volatility models using ARCH/GARCH framework

### 3. HYPOTHESIS TO BE TESTED

$H_{01}$  = Time series is stationary in case of NSE, NASDAQ, Hang Seng, FTSE, BOVESPA

$H_{02}$  = There is no autocorrelation in the error variance

$H_{03}$  = Volatility in the current period is related to its value in the previous period, plus a white noise error term i.e. impact of foreign markets.

### 4. TOOLS & TECHNIQUES OF RESEARCH

The data will be tabulated and will be analysed using statistical software like Ms-Excel and E-VIEWS. The analysis will include calculating the stock index returns and volatility of the five stock indexes for the period of study. Further, it would involve a comparative analysis of the stock returns and volatility patterns of the five selected indexes. It will also include study on the forecasting ability of various volatility models using ARCH/GARCH framework. ARCH/GARCH is the statistical techniques.

**4.1** ARCH ( $\alpha$ ) model which was introduced by Robert Engle<sup>13</sup> (1982) means that volatility reacts quiet intensely to market moments if  $\beta + \alpha$  is close to "1" then a shock at time  $t$  will persist for many future periods. A high value of it implies a long memory. The specification of an ARCH ( $q$ ) model (Engle 1982) is given by<sup>14</sup>:

$$\sigma_t^2 = \omega + \sum_{i=1}^q \alpha_i \varepsilon_{t-i}^2$$

$i=1$

where,

$\omega, \alpha_1, \dots, \alpha_q$  = parameters to be estimated

$\sigma_t^2$  = conditional variance at period  $t$

$q$  = number of lags included in the model

$\varepsilon_t$  = innovation in return at time  $t$

In the ARCH ( $q$ ) model, the volatility at time  $t$  is a function of  $q$  past squared returns. To describe the ARCH model clearly, the criterion are  $\omega > 0$  and  $\alpha_1 \geq 0, \dots, \alpha_q \geq 0$ . The above equation gives the conditional variance equation.

**4.2** GARCH ( $p, q$ ) model which was introduced by Tim Bollerslev (1986) indicates shocks to conditional variance takes a long times to die out so volatility is persistent. GARCH coefficient reflects the impact of previous days forecast about volatility over current volatility, whereas coefficient of ARCH reflects impact of new information about volatility. The specification of a GARCH ( $p, q$ ) is given by

$$\sigma_t^2 = \omega + \sum_{i=1}^p \alpha_i \varepsilon_{t-i}^2 + \sum_{j=1}^q \beta_j \sigma_{t-j}^2$$

where,

$\omega, \alpha_1, \dots, \alpha_q, \beta_1, \dots, \beta_p$  = parameters to be estimated

$q$  = number of return innovation lags included in the model

$p$  = number of past volatility lags included in the model

The coefficients of the model should meet the criterion for the conditional variance in the GARCH ( $p, q$ ) model.  $\beta_j$ 's in the model refers to GARCH coefficients, on the other hand  $\alpha_i$ 's refers to ARCH coefficients. For the GARCH (1,1) model, the criterion are-  $\omega > 0, 0 \leq \alpha_1, 0 \leq \beta_1$ , and  $\alpha_1 + \beta_1 \leq 1$ .

## ANALYSIS & DATA INTERPRETATION

Analysis & Interpretation of Data is basically a procedure for obtaining raw data in order to analyse it to obtain useful and usable information out of it. Statistician John Tukey<sup>15</sup> defined data analysis in 1961 as: "[P]rocedures for analyzing data, techniques for interpreting the results of such procedures, ways of planning the gathering of data to make its analysis easier, more precise or more accurate, and all the machinery and results of (mathematical) statistics which apply to analyzing data.

### 1. CONCEPT OF STATIONARITY

In stationarity time series, shocks do not last long and over a span their influence will get eliminated, as the series returns back to its long term mean values. Whereas, the mean or the variance of non-stationary series does not have a long run mean value to which the series reverts back. Even the variance will subject to time, which will reach infinity as time goes to infinity. Before applying ARCH family models one has to identify stationarity of the series.

2. METHODS OF TESTING STATIONARITY

2.1 GRAPHICAL REPRESENTATION OF ORIGINAL SERIES

FIGURE-1: NSE GRAPHICAL REPRESENTATION OF ORIGINAL DATA

AVERAGE

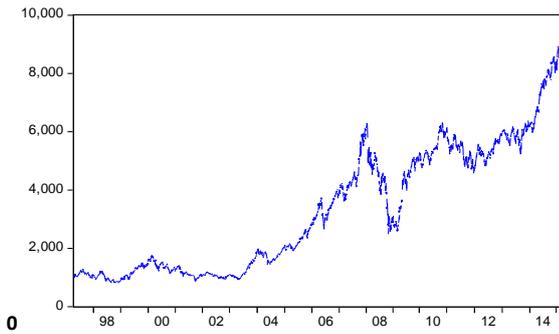


FIGURE-2: BOVESPA GRAPHICAL REPRESENTATION OF ORIGINAL DATA

AVERAGE

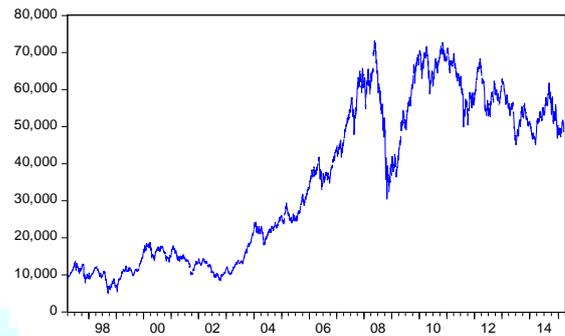


FIGURE-3: FTSE GRAPHICAL REPRESENTATION OF ORIGINAL DATA

AVERAGE

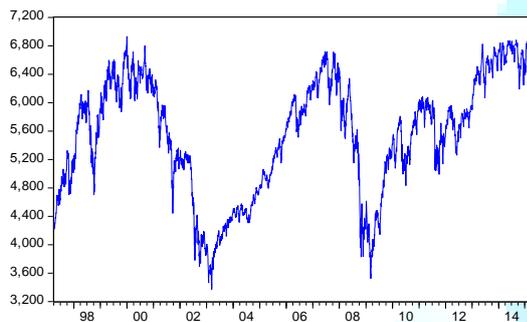


FIGURE-4: HENG SENG GRAPHICAL REPRESENTATION OF ORIGINAL DATA

AVERAGE

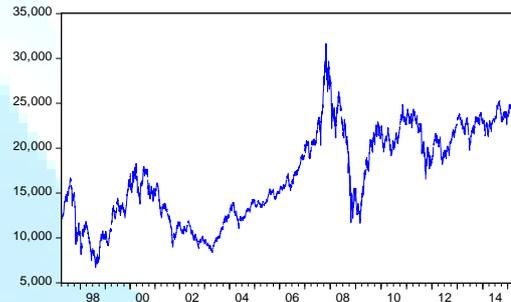
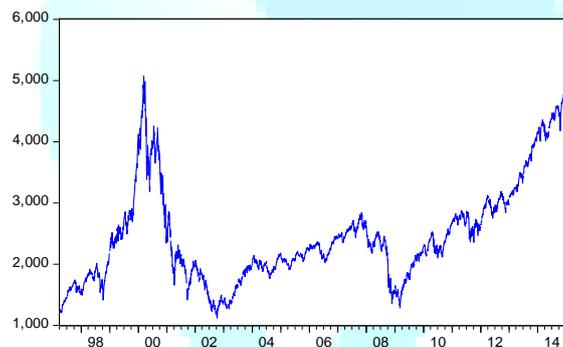


FIGURE-5: NASDAQ GRAPHICAL REPRESENTATION OF ORIGINAL DATA

AVERAGE



The Figures -1, 2, 3, 4, 5 have continuously changing mean and variance over time. This shift in the mean over time shows heteroscedasticity of variance. Thus these graphs indicate the result of average of original data series and show that the series is non-stationary.

3. HOW TO MAKE SERIES STATIONARY

In order to make the original series stationary one has to generate the average of the four series i.e. open, high, low, close. The formula is mentioned below:

$$\text{Generate Average} = (\text{open} + \text{high} + \text{low} + \text{close}) / 4$$

After generating the average series one has to take log of the generated average series. The formula for the same is:

$$\text{Generate return} = \text{dlog}(\text{average}) * 100$$

3.2 GRAPHICAL REPRESENTATION OF RETURN SERIES

FIGURE-6: NSE GRAPHICAL REPRESENTATION OF RETURN DATA

RETURN

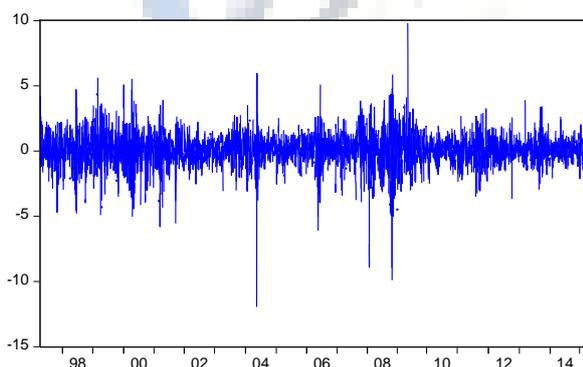


FIGURE-7: BOVESPA GRAPHICAL REPRESENTATION OF RETURN DATA

RETURN

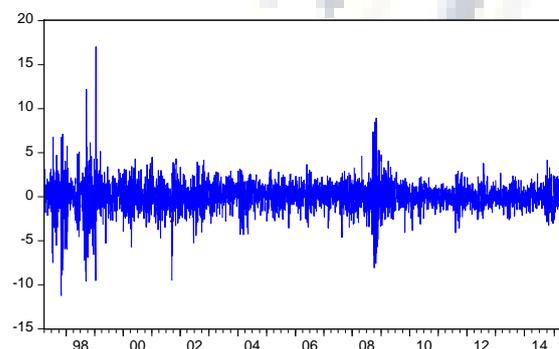


FIGURE-8: FTSE GRAPHICAL REPRESENTATION OF RETURN DATA RETURN

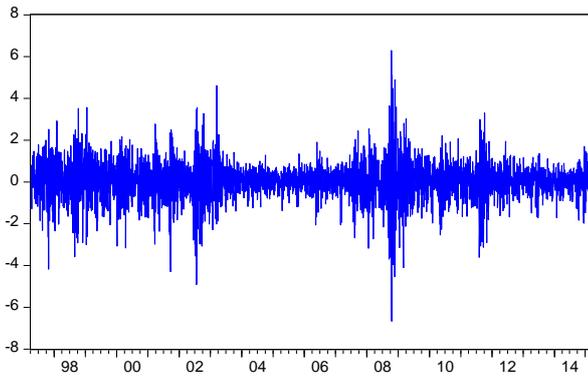


FIGURE-9: HENG SENG GRAPHICAL REPRESENTATION OF RETURN DATA RETURN

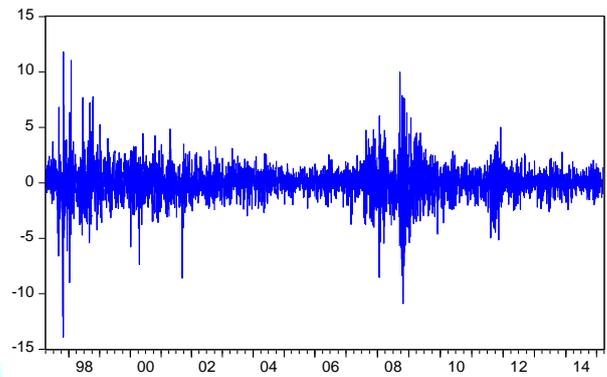
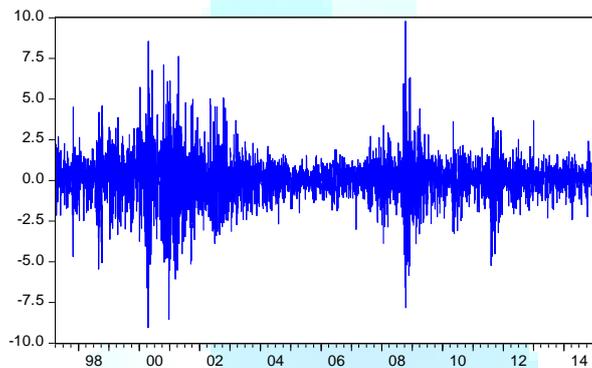


FIGURE-10: NASDAQ GRAPHICAL REPRESENTATION OF RETURN DATA RETURN



Figures - 6, 7, 8, 9, 10 there is mean reversion, which means that the graph returns back to zero and the mean remains constant. Thus representing the result of the calculated return data series, is depicting stationarity.

**4. ANALYSIS OF THE IMPACT OF FOREIGN MARKETS ON NATIONAL STOCK EXCHANGE BY USING GARCH FAMILY MODELS**

National Stock Exchange of India is one of the leading exchanges of the world, as it has reached the global standards. In the analysis all the results have been explained in detail using NSE index and later on the impact of all the four indices only the final table has been displayed.

TABLE 1: ARCH-LM TEST AT LAG 2 USING RETURNS OF NSE

Heteroskedasticity Test: ARCH				
F-statistic	1059.309	Prob. F(2,5882)	0.0000	
Obs*R-squared	1558.387	Prob. Chi-Square(2)	0.0000	
Test Equation:				
Dependent Variable: RESID^2				
Method: Least Squares				
Date: 07/18/15 Time: 19:22				
Sample (adjusted): 1/09/1991 3/31/2015				
Included observations: 5885 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.521782	0.181265	8.395347	0.0000
RESID^2(-1)	0.581230	0.012647	45.95844	0.0000
RESID^2(-2)	-0.243340	0.012647	-19.24112	0.0000
R-squared	0.264807	Mean dependent var		2.298363
Adjusted R-squared	0.264557	S.D. dependent var		15.99119
S.E. of regression	13.71372	Akaike info criterion		8.075181
Sum squared resid	1106205.	Schwarz criterion		8.078586
Log likelihood	-23758.22	Hannan-Quinn criter.		8.076364
F-statistic	1059.309	Durbin-Watson stat		1.908764
Prob(F-statistic)	0.000000			

Initially the ARCH-LM test was run with lag (1) and the results were significant showing presence of ARCH effect in the series but to confirm the order of ARCH effect lags were increased and it was found that for NSE test results were significant till lag (2). It confirms that NSE returns series has ARCH effect of order (2). Since ARCH effect has been confirmed, the series can be modelled using GARCH family model.

The ARCH-LM test on FTSE, NASDAQ, Hang Seng and BOVESPA return series using GARCH (1,2) and model which is the parsimonious model. Thus from the results it has been confirmed that heteroskedasticity has been removed, as p-value is more than 5%.

Below are the results the return series showing of FTSE, NASDAQ, Hang Seng and BOVESPA global impact on volatility of National stock exchange:

4.1 MEASURING THE IMPACT OF BOVESPA ON NSE BY APPLYING GARCH

TABLE 2: STUDYING THE IMPACT ON NSE OF BOESPA THROUGH GARCH (1, 2)

Dependent Variable: RETURN  
 Method: ML - ARCH (Marquardt) - Normal distribution  
 Convergence achieved after 14 iterations  
 Presample variance: backcast (parameter = 0.7)  
 $GARCH = C(2) + C(3)*ARCH(-1)^2 + C(4)*ARCH(-2)^2 + C(5)*GARCH(-1) + C(6)*BRETURN$

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	0.133639	0.013464	9.925450	0.0000
C	0.029341	0.003766	7.791518	0.0000
ARCH(1)	0.285002	0.022602	12.60956	0.0000
ARCH(2)	-0.187284	0.024233	-7.728418	0.0000
GARCH(1)	0.886457	0.010576	83.81856	0.0000
BRETURN	-0.035793	0.003951	-9.059349	0.0000
R-squared	-0.004422	Mean dependent var	0.049839	
Adjusted R-squared	-0.004422	S.D. dependent var	1.260335	
S.E. of regression	1.263118	Akaike info criterion	2.979637	
Sum squared ARCH	7134.931	Schwarz criterion	2.988230	
Log likelihood	-6657.958	Hannan-Quinn criter.	2.982666	
Durbin-Watson stat	1.236091			

4.2 MEASURING THE IMPACT OF HANG SENG ON NSE BY APPLYING GARCH

TABLE 3: STUDYING THE IMPACT ON NSE OF HANG SENG THROUGH GARCH (1, 2)

Dependent Variable: RETURN  
 Method: ML - ARCH (Marquardt) - Normal distribution  
 Convergence achieved after 15 iterations  
 Presample variance: backcast (parameter = 0.7)  
 $GARCH = C(2) + C(3)*ARCH(-1)^2 + C(4)*ARCH(-2)^2 + C(5)*GARCH(-1) + C(6)*HRETURN$

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	0.118028	0.013014	9.069382	0.0000
Variance Equation				
C	0.024605	0.003719	6.615501	0.0000
ARCH(1)	0.317737	0.020658	15.38083	0.0000
ARCH(2)	-0.212578	0.022751	-9.343640	0.0000
GARCH(1)	0.882519	0.011508	76.68715	0.0000
HRETURN	0.000657	0.001047	0.626950	0.5307
R-squared	-0.002970	Mean dependent var	0.049411	
Adjusted R-squared	-0.002970	S.D. dependent var	1.259257	
S.E. of regression	1.261125	Akaike info criterion	2.986998	
Sum squared ARCH	7133.112	Schwarz criterion	2.995570	
Log likelihood	-6693.837	Hannan-Quinn criter.	2.990019	
Durbin-Watson stat	1.237681			

4.3 MEASURING THE IMPACT OF NASDAQ ON NSE BY APPLYING GARCH

TABLE 4: STUDYING THE IMPACT ON NSE OF NASDAQ THROUGH GARCH (1, 2)

Dependent Variable: RETURN  
 Method: ML - ARCH (Marquardt) - Normal distribution  
 Convergence achieved after 19 iterations  
 Presample variance: backcast (parameter = 0.7)  
 $GARCH = C(2) + C(3)*ARCH(-1)^2 + C(4)*ARCH(-2)^2 + C(5)*GARCH(-1) + C(6)*NRETURN$

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	0.116033	0.013008	8.920047	0.0000

Variance Equation

C	0.024736	0.003728	6.635589	0.0000
ARCH(1)	0.316517	0.020483	15.45260	0.0000
ARCH(2)	-0.211274	0.022596	-9.350011	0.0000
GARCH(1)	0.882211	0.011531	76.50442	0.0000
NRETURN	0.001300	0.001053	1.235405	0.2167

R-squared	-0.002869	Mean dependent var	0.048658
Adjusted R-squared	-0.002869	S.D. dependent var	1.257917
S.E. of regression	1.259720	Akaike info criterion	2.985175
Sum squared ARCH	7141.029	Schwarz criterion	2.993722
Log likelihood	-6712.135	Hannan-Quinn criter.	2.988186
Durbin-Watson stat	1.238250		

4.4 MEASURING THE IMPACT OF FTSE ON NSE BY APPLYING GARCH

TABLE 5: STUDYING THE IMPACT ON NSE OF FTSE THROUGH GARCH (1, 2)

Dependent Variable: RETURN  
 Method: ML - ARCH (Marquardt) - Normal distribution  
 Convergence achieved after 14 iterations  
 Presample variance: backcast (parameter = 0.7)  
 $GARCH = C(2) + C(3)*ARCH(-1)^2 + C(4)*ARCH(-2)^2 + C(5)*GARCH(-1) + C(6)*FRETURN$

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	0.116097	0.013012	8.922180	0.0000

Variance Equation

C	0.024678	0.003716	6.640197	0.0000
ARCH(1)	0.316381	0.020493	15.43817	0.0000
ARCH(2)	-0.211358	0.022601	-9.351857	0.0000
GARCH(1)	0.882453	0.011487	76.82023	0.0000
FRETURN	0.001209	0.001061	1.139741	0.2544

R-squared	-0.002875	Mean dependent var	0.048658
Adjusted R-squared	-0.002875	S.D. dependent var	1.257917
S.E. of regression	1.259724	Akaike info criterion	2.985224
Sum squared ARCH	7141.067	Schwarz criterion	2.993771
Log likelihood	-6712.246	Hannan-Quinn criter.	2.988236
Durbin-Watson stat	1.238243		

**CONCLUSION**

The expected return of NSE depends on its own volatility of previous days. Apart from this foreign stock markets have some impact on NSE daily returns, which does not persist in the long run. Researchers tried to find out the foreign market impacts viz NASDAQ, FTSE, BOVESPA, Hang Seng. Best models of GARCH family are applied in order to study the impact of foreign markets on NSE. Individual correlation is established and impact of each market on NSE has been obtained. Though a very little impact is realised but somehow significant results have been obtained. Volatility of BOVESPA has high influence among the other three markets i.e. Hang Seng, NASDAQ and FTSE. It may be understood that BOVESPA and NSE are in emerging stages and showing some integration. While as volatility Hang Seng is the second index, which has significant impact on NSE. The reason may be it is one among the Asian countries and have a spillover impact on NSE. Volatility of NASDAQ and FTSE has shown least impact on NSE. The time gap daily volatility and difference of macro-economic variables there is less impact on NSE.

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**SECTORAL INDICES: ANALYSIS AND IMPACT ON NATIONAL STOCK INDEX**

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**ABSTRACT**

*Sentiments are most powerful tool and top pick in Indian Stock Market. Sentiments of the investors believe that few sectors are always better to invest than other sectors. This study aims to explore the empirical sectoral impact on the CNX Nifty index. All the sectoral indices are studied, correlation-regression-ANOVA-t statistics are conducted to test which sectors have major impact and less impact on the Nifty. Auto sector has highest correlation with Nifty, while PSU Bank least. Almost 99% variation in Nifty can be explained by sectoral indices variation. Metal and Energy are negatively correlated with Nifty. This study thus attempts to guide investors to invest empirically as well.*

**KEYWORDS**

CNX Nifty, sectoral indices, correlation, regression, t-test.

**INTRODUCTION**

National stock exchange (NSE) is leading indicator of financial health of the country. Stock market is considered to be the best and most convenient investment option these days. But where to invest is always a question with ambiguous answer for investors and traders as well. Some sectors overpower the other for some investors, but traders might under power the same sector. Thus sectoral indices play a unique and important role in stock market. This study has analyzed all the sectoral indices of the CNX Nifty and its relation with the same. The indices taken into consideration are FMCG, Auto, Bank, Energy, IT, Media, Metal, Pharma, PSUBank and CNX Nifty. The data of all indices is taken from NSE website.

**NEED OF THE STUDY**

It does not need to mention that stock market in India plays on the psychology of the people. Many a times its observed that stock market move in particular direction whereas few sectors move in opposite direction. This is where sectoral indices come to play its role. The Sectoral indices are designed to provide a single value for the aggregate performance of a number of companies representing a sector of the economy. It is most important investment decision to study sectoral indices before investing. Thus need arises to study sectoral indices and its impact on CNX Nifty. This paper is one such attempt.

**STATEMENT OF THE PROBLEM**

Sectoral Indices: Analysis and impact on National Stock Index.

**OBJECTIVES**

1. To analyse the impact of sectoral indices on CNX Nifty
2. To study correlation between all indices.
3. To study which sectors have major contributions in Nifty and how much contribution.

**LITERATURE REVIEW**

A study by **Madhavi. M. & Radhika Ravi (2010)** to understand the performance of sectoral indices with performance of Sensex, and it was found that there is a high range of positive correlation between the Sensex and the six selected sectoral indices of BSE. An attempt was made by **Piyush Kumar Singh & Venkata Vijay Kumar (2011)** to understand the movement of sectoral returns and their contributions towards the Sensex returns. The study could find that the Sensex returns could be explained with the help of selected sectoral index returns only and there is significant relationship between the different sectors' contribution to the final Sensex returns.

**Kallberg & Pasquariello (2008)** have done analysis on the 81 sectoral indices of the US market and had found that there has been large correlation between the excess movement in the sectoral indices and there is significance between each other in the movement in a single direction.

**Philipp Fasnacht & Henri Loeberge (2007)** Studied International stock market correlations: A sectorial approach and they found that sectorial correlations between markets are more stable over time than correlation at the market level as well as sectorial correlations within countries. Sectors such as Industry, Financials and Consumer services present however a rather high proportion of inconsistent correlation coefficients.

A study for testing the market efficiency of the sample companies listed on the BSE PSU Index of Bombay Stock Exchange found that the PSU Index performed well during the study period and the investors of PSU companies earned maximum return through stock market operations (**Selvam and Ramkumar, 2010**).

**Meric et al. (2008)** studied the portfolio diversification implications of the co-movements of sector indexes in the US, UK, German, French, and Japanese stock markets in bull and bear markets, and found the difference between investing in the same industry in different countries and investing in different industries within the same country.

An Efficient Stock Market provides the vehicle for mobilizing savings and investment resources for developmental purposes (**Fama, 1991**). Moreover, the analysis of different sectoral indices facilitates the investors to use it as innovative investment opportunity in their portfolio management.

In a study titled "Long run and Short run relationship between the main stock indexes: Evidence from Athens Stock Exchange" by Patra&Poshakwale(2008), it was found that there has been lower relation in the sectoral returns in the long run. However there was significant impact of the banking sector on the other sector indices return and variance. This research paper suggested that the changes and information of the banking sector could be used in order to predict the returns of the other sectoral indices in short term.

**METHODOLOGY**

This paper reviews annual data of 244 days from 1-july-2014 to 30-jun-2015. Closing price of all the sectoral indices and closing price of nifty is taken into consideration. All the indices namely FMCG, Auto, Metal, IT, Pharma, Energy, Media, PSU bank and their concentration in Nifty is studied.

Model Formulated is:

$$\text{Nifty} = \alpha_0 + \beta_1\text{FMCG} + \beta_2\text{Auto} + \beta_3\text{Bank} + \beta_4\text{Energy} + \beta_5\text{IT} + \beta_6\text{Media} + \beta_7\text{Metal} + \beta_8\text{Pharma} + \beta_9\text{PSUBank} + \mu$$

Where Nifty, FMCG, Auto, Bank, Energy, IT, Media, Metal, Pharma, PSUBank are sectoral indices closing price,

$\alpha_0$  = constant of the model

$\beta_1 \dots \beta_9$  = coefficients of the model

$\mu$  = error terms

The data is analyzed (Regression and correlation) using SPSS, students' t test was used to test significance at 5% significance level.

**DISCUSSIONS AND FINDINGS**

FIG. 1

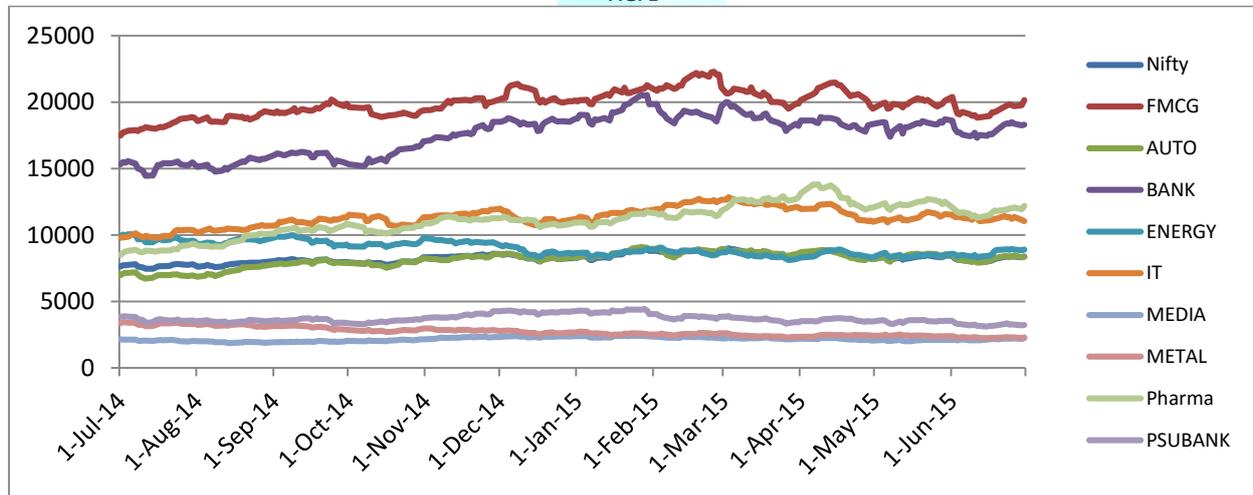


Figure 1 shows the volatility of CNX Nifty and sectoral indices. It can be noted that Energy and Metal does not follow the trend with Nifty and other sectoral indices.

TABLE 1: REGRESSION ANALYSIS

Variables	Coefficients
R	0.997
Adjusted R2	0.994
Durbin-Watson	0.358
N	244
Constant	-523.539

As per Table 1: Value of R is 0.997, which states that 99.7% variation in CNX Nifty index is caused by changes in the value of sectoral indices. The value of Durbin-Watson is 0.358, thus autocorrelation exists in the study and variables are correlated (as d is less than 2).

TABLE 2: COEFFICIENTS OF REGRESSION ANALYSIS

Variable	B value	t-statistics	Sig
FMCG	.046	10.377	.000
AUTO	.066	4.021	.000
BANK	.181	35.401	.000
ENERGY	.113	10.840	.000
IT	.163	23.743	.000
MEDIA	.128	3.580	.000
METAL	.393	15.166	.000
Pharma	.057	12.313	.000
PSUBANK	-.186	-10.465	.000

Except PSUBank index, all other sectoral indices have positive  $\beta$  coefficients, which shows that it follows reverse pattern with Nifty trend. Bank, IT and Metal Indices provide major contribution to the Nifty. Also Sig. value of all the indices are 0.000, which shows that all sectoral indices are significant with CNX Nifty index.

The deduced regression equation is,

$$\text{Nifty} = -523.539 + (0.046)\text{FMCG} + (0.066)\text{Auto} + (0.181)\text{Bank} + (0.113)\text{Energy} + (0.163)\text{IT} + (0.128)\text{Media} + (0.393)\text{Metal} + (0.057)\text{Pharma} - (0.186)\text{PSUBank}$$

**CORRELATION ANALYSIS**

Karl Pearson Coefficient of Correlation was applied to study the relationship between CNX Nifty and the Sectoral Indices of Nifty.

TABLE 3: CORRELATION ANALYSIS

	Nifty	FMCG	AUTO	BANK	ENERGY	IT	MEDIA	Pharma	PSUBANK	METAL
Nifty	1	.891	.946	.916	-.519	.923	.704	.799	.416	-.650
FMCG	.891	1	.868	.820	-.541	.845	.668	.687	.456	-.591
AUTO	.946	.868	1	.924	-.638	.892	.665	.862	.359	-.777
BANK	.916	.820	.924	1	-.713	.795	.795	.784	.482	-.783
ENERGY	-.519	-.541	-.638	-.713	1	-.559	-.404	-.740	-.019	.896
IT	.923	.845	.892	.795	-.559	1	.562	.801	.216	-.683
MEDIA	.704	.668	.665	.795	-.404	.562	1	.399	.749	-.460
Pharma	.799	.687	.862	.784	-.740	.801	.399	1	-.025	-.870
PSUBANK	.416	.456	.359	.482	-.019	.216	.749	-.025	1	.053
METAL	-.650	-.591	-.777	-.783	.896	-.683	-.460	-.870	.053	1

As per the table, it can be conferred that, all sectoral indices are highly positively correlated with Nifty index excluding Energy and Metal Index. Energy and Metal Index are negatively correlated with Nifty index. It can be noted that Energy and PSUBank index have least correlation and Nifty with Auto Index have highest correlation. Also Bank and Metal index are strongly negatively correlated.

## CONCLUSION

Regression analysis is used to formulate the model to measure sectoral indices' impact on CNX Nifty. It is seen that 99.7% of the variation in Nifty can be explained by changes in sectoral indices. Also all sectoral indices, except Energy and Metal index are positively correlated with Nifty. Energy and Metal are negatively correlated with CNX Nifty in the considered time period. Using Durbin-Watson it is found that autocorrelation exist among indices. Bank, Metal, IT and Media are major contributors of CNX Nifty index. Thus investors can study the pattern of sectoral indices before investing to gain maximum profits and minimize risk.

## LIMITATIONS

- The research is conducted for particular time period, which may not be applied for other time period.
- Less number of research paper were available on sectoral indices and thus review is based on them only.
- The study is based on the analysis of the secondary data therefore error and inconsistencies of such data will be applicable to the study.

## FUTURE SCOPE

The research is done on CNX Nifty index, further studies can be carried out on BSE Index, cross countries index. Also different time zone can be considered for further studies. Econometric modeling can be applied to study cointegration between sectoral indices.

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**WORK LIFE BALANCE (WLB): A CHALLENGE FOR EMPLOYEES IN INDIA**

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**ABSTRACT**

*India is growing at a fast pace. Everyone is in a hurry to succeed and earn money. This is leading to overtime, nuclear family, etc. Somewhere in this run we are sacrificing our family time. We have become like machines. Technology development has intertwined the personal and work life. This topic has always attracted my attention. I have seen and observed that how today we face challenge to maintain a balance between meeting and fulfilling our career demands and family needs. For me my mother and sister are good example. Even when I was working I used to find it hard to take out time for personal relations. Today even Indian companies also recognize these problems and have come up with various options for their employees. Thus this study aims to gain a greater understanding of employee's views towards work-life balance initiatives and identifying organizational factors that may be important for employees achieving a better balance between work and non-work life.*

**KEYWORDS**

work life balance, Indian employees.

**INTRODUCTION**

India is growing at a fast pace. Everyone is in a hurry to succeed and earn money. This is leading to overtime, nuclear family, etc. Somewhere in this run we are sacrificing our family time. We have become like machines. Technology development has intertwined the personal and work life and this topic has always attracted my attention. Indian companies also recognize these problems and have come up with various options for their employees. Thus this study aims to gain a greater understanding of employee's views towards work-life balance initiatives and identifying organizational factors that may be important for employees achieving a better balance between work and non-work life.

**FACTORS INFLUENCING WORK-LIFE BALANCE**

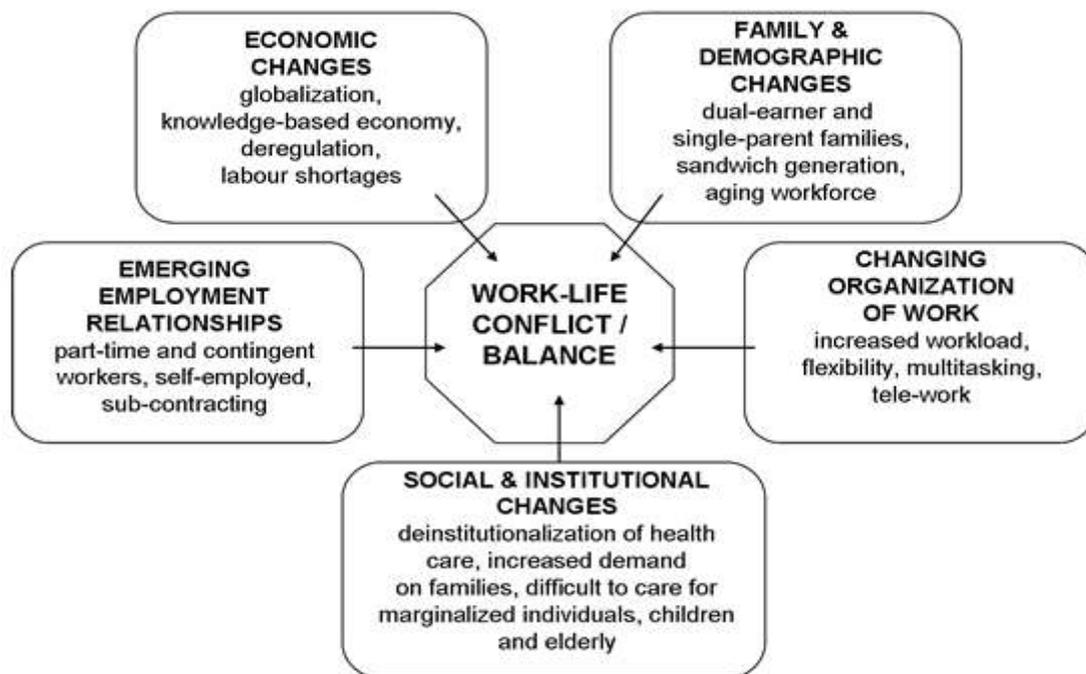
- Increased number of women working – 70% in 2000 compared to 47% in 1959.
- Majority of women with dependent children working – 65% compared to 90% of men.
- Majority of women return to paid employment after childbirth.
- Increased incidence of one parent families (1 in 4).
- Increased life expectancy is resulting in an ageing population.
- Elderly relative responsibilities are on the increase – 6 million adults have care responsibilities of another adult.
- Trend for starting family later will result in some employees having both child care and elder-care responsibilities.
- Average age for first baby is 29 and birth rate is 1.7 children per woman.

**NEED/IMPORTANCE OF WLB**

- 1. Changing Social Scene:** In today's world maintaining work-life balance is the greatest challenge employees' face. They have realized that their personal lives have an effect on their work life. Hence they are striving hard to maintain a balance between the two. Also the introduction of new softwares and enhancement in technology has shrunk the world in a small nutshell where connectivity has increased manifolds, pertaining to which maintaining a particular social life has become of utmost importance. Even, maintaining regularity in behaving social in nature is very important as it has become a driving factor for all organizations to monitor the technological presence of an individual. According to Maslow's hierarchy of needs, social recognition is considered to be one of the most important factors required for an individual to grow as well as sustain in an organization.
- 2. Changing Work culture:** Today's work culture provides flexible work hours, focus on results and recognition of achievements. Also, performance evaluation is given utmost importance in every organization. Performance management refers to the evaluation of performance of an individual on set parameters, usually decided by the upper level management. Performance management can also be done by using various tools, called performance management systems, which help evaluate the performance of an individual promptly and with least errors. The changing work culture often leads to hindering of productivity which ultimately hampers the performance of an individual. Work culture also plays a pivotal role in the job satisfaction of an individual. Every individual needs a peaceful and friendly environment to carry out his job in a better and optimistic way.
- 3. Increased Work time:** Due to the undefined time slot of working hours, it becomes extremely difficult for employees to maintain balance between their personal as well as professional lives. Priority is shifted to professional life than that of personal life which becomes hampering after a certain while. Especially for young professionals who want to lead a dynamic life consisting of job along with family and friends find it very difficult to balance both in the wake of achieving a fair position. This creates emotional imbalance and hence leads to frustration. If time is not properly set, productivity is hampered as well as, employee morale goes down. Only monetary motivation is not always important to hold back an employee. Such factors often lead to increased absenteeism. Absenteeism is a situation where an employee is on leave from his job, either due to genuine reasons such as sickness, ill health, or due to negative approach towards the organization. In both the cases, the organization suffers the low productivity that may have been cured from the employee's end.
- 4. Dual Income Families:** The shift in attitudes, work styles and cultures has disturbed the work-life balance. Working mothers have major responsibilities of managing both home and workplace. This makes it all the more important to balance work and life. Therefore it is important to have a proper job design in every organization so as to maintain clarity in the working of an individual and to avoid clashes in between employees. Women workers have a major slot of employees who suffer from stress related diseases. To curb this number, organization should have sufficient motivating factors to keep such employees happily working. Also consideration of time, and creation of proper and peaceful environment is a vital factor to keep women employees working happily and stress-free.

FIG. 1

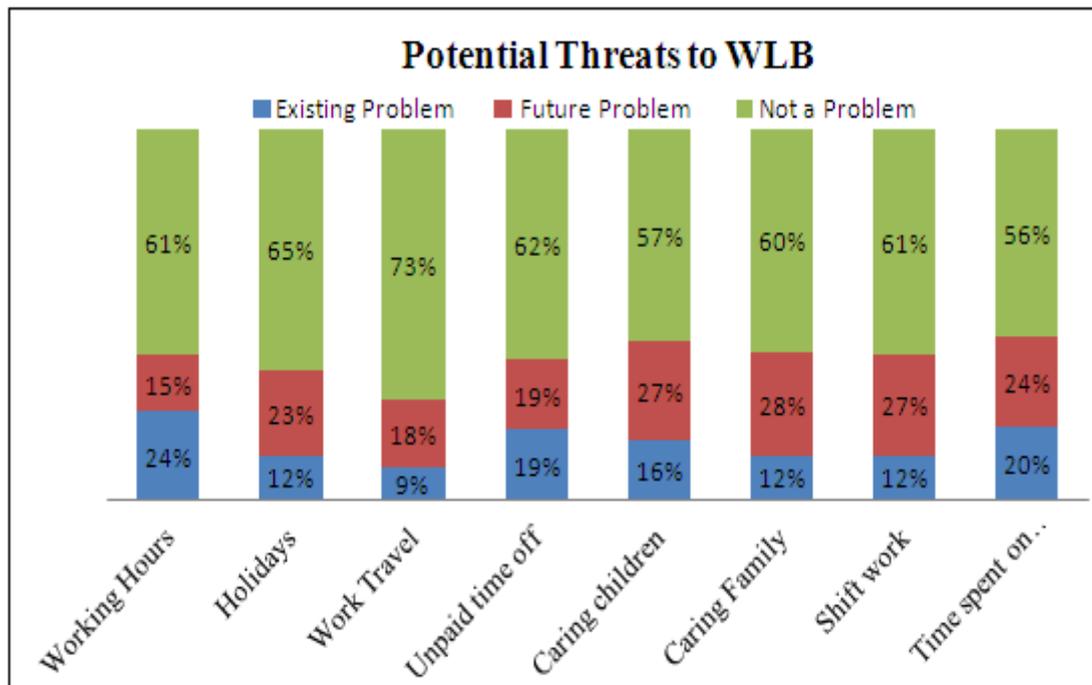
### Why Is Work-Life Balance so Important in Today's World?



Thus looking at above factors and from study of one of the Indian refinery following factors were rate which can be potential threat to Work Life Balance (WLB)

1. **Economic changes:** In an organization various factors come together to form and increase overall productivity. The phase of globalization has brought in its wake a new era of industries and a fresh motivation for all individuals to grow and prosper. Also the enhancement in technology has brought nations closer pertaining to which distances have reduced and the array of market has increased. These new opportunities create cut throat competition and thus the overall impact can be seen on the work pressure created on employees. This ultimately results in increased time slots, less social networking and so on. Not to mention, the development of market has originated and developed a knowledge-based economy. Also globalization has brought in its wake the regulation and deregulation of money which has created a confusion and also increased work pressure for employees.
2. **Family & demographic changes:** With the changing environment, today's world possesses a huge number of capable and well deserved women employees who face a tough time to balance work life as well as personal life. Family issues also make it difficult for employees to concentrate on their work. Thus, motivation factors also come to a standstill when it comes to maintaining the balance between work life as well as personal life. The current scenario deals with families where earning daily bread is not the responsibility of a single person. It is now also supported by the woman of the house. Thus dual earning leads to adjustments in personal life and also creates time boundations in professional life. This sort of dual earning is a habit which leads to diversion of priorities and even people after attaining a certain age wish to continue working.
3. **Changing organization of work:** With increasing competition the workload also increases manifold. There are a number of workload theories which ultimately lead to the conclusion that increase in workload reduces productivity and also creates a distrust in the minds of employees. Employees relate the given workload to the remuneration paid to them. If there is even a little dissatisfaction in the mind of employees regarding the remuneration and workload offered, the attrition rate of the organization goes high. Few organizations expect their employees to be flexible. This sort of multitasking is injurious to the organization. As they say, jack of all trades, master of none, is the situation which any organization must work to avoid so that the quality of work is not hampered.
4. **Social & institutional changes:** With the increase in remuneration, the expectation of friends and family also increases. These expectations are difficult to meet with as the growing remuneration also brings along with it increased responsibilities. Nevertheless, employees demand fair remuneration not only to fulfill their daily needs, but also to provide themselves with the mental satisfaction of earning well at a proper position. Also the cultural and moral obligations of an individual are the priorities which cannot be neglected. In order to make sure that these obligations are met with properly, the employees need to change the routine of work quite often. India is a country with different dialects, caste and a number of occasions. It becomes a sort of duty of the employee to deal with these in a positive manner and also adhere to the cultural values as and when they arise.
5. **Emerging employment relationships:** It is very important for any individual to provide him with the basic facilities as well as peaceful environment. But at the same time it is also important for every individual to have a proper social circle. These factors help an employee sustain in the organization. Also, such factors help in employee retention. Employees who are appointed on different basis can also be considered to have a good rapport with those working on full time. Contract employees are also adding to the productivity of the organization and are also contributing to the organization to reach its minimum goal. In this case, the emerging employment relationships should be fostered and not be dragged into dirty politics which will result into clashes and also create a negative atmosphere.

FIG. 2

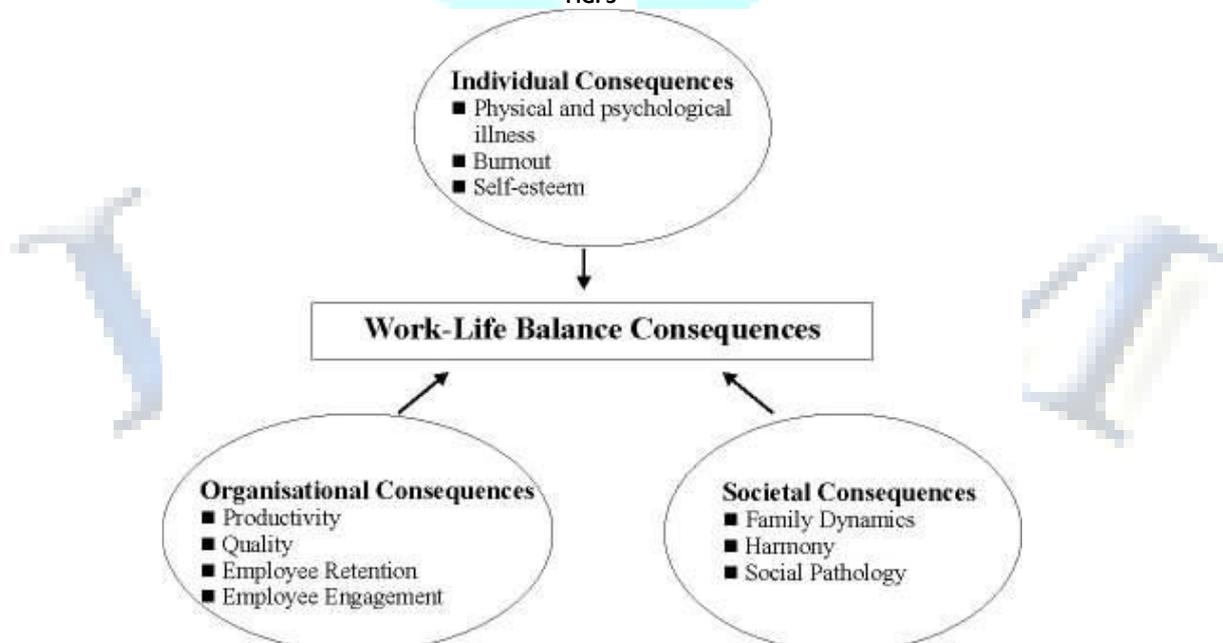


**POTENTIAL THREATS TO WLB**

1. Working hours: Working hours if increased, creates the question of priority, commitment and responsibility which ultimately leads to disturbance in family life. For 61% it is not a problem.
2. Holidays: An employee working in an organization is entitled to get leaves as and when required, either be it for health reasons or for any other personal reasons. If he is denied getting leaves, it creates dissatisfaction in the minds of employees.
3. Work travel: Only 9% is currently the problem for work travel and for 73% it is not a problem as there are too many conveyances available in today's scenario.
4. Unpaid time off: The remuneration to be paid to employees is on the basis of the work given to them. But if they do not get that remuneration either on time or for any extra work done, employees' willingness to work goes down.
5. Caring children: Children in any household are a prime responsibility to deal with because of which half of the concentration is diverted towards children and their daily duties.
6. Caring family: for 60% caring for family is not a problem. But for nuclear families it becomes very difficult as members are less in the family to care for and also look after each other.
7. Shift work: Shift work is a big problem especially for female workers as it is simply not possible to handle both equally perfectly.
8. Time spent on.. : Many times, the pressure of workload is such that, personal likes come to a halt and are under looked by many as a result of which mind diverting factors are very little.

**CONSEQUENCES OF IMPROPER WORK LIFE BALANCE**

FIG. 3



1. **Individual consequences:** If work life balance is not properly maintained it may lead to stress related diseases and also psychological and physical illness. In certain cases, employees tend to take it over their ego which creates clashes and negation in the organisation.

2. **Organizational consequences:** In the advent of improper work life balance, the productivity of employee goes down. In order to complete the given work, employees often tend to complete the work and are ready to compromise in quality of the work hence delivered, thus creating a question on employee engagement. Also such factors make it difficult for an employee to sustain in the organization and thus employee retention becomes problematic.
3. **Societal consequences:** Family dynamics play a vital role in order to encourage an employee to work and move ahead in a positive way. Harmony at home and work place are very important to help an employee deliver quality work. At the same time, an individual also wants to be socially sound so as to maintain and foster his relationships with his peers, relatives and friends.

### HOW DOES IT IMPACT YOU AS MANAGER?

As a manager understanding work life balance will help me to maintain a health work culture and increase employees' productivity. It will also help me to:

- reduced employees turnover rates
- becoming a good employer or an employer of choice
- increased return on investment in training as employees stay longer
- reduced absenteeism and sick leave
- improved morale or satisfaction
- greater employees loyalty and commitment
- improved productivity

### CONCLUSION

From the information gathered it can drawn that there is a strong perception among the respondents that it is important to achieve balance between work & personal life and it enables people to work better. Employees expect that organization should be empathetic towards employees' needs by providing Work Life Balance policies & flexible working arrangements. It can influence employees' choice in terms of employment. From organization point of view it makes good business sense to support WLB not just to recruit & retain employees but also because employees' feel that WLB enables them to work better.

### RECOMMENDATIONS

- There is a need to clearly communicate the organization commitment to WLB, to raise awareness and to improve knowledge and understanding of policies. It is therefore suggested that information on current and future policies be provided in a user-friendly version through the Intranet, within the context of the Equal Opportunity and Diversity website.
- Ensure fairness and consistence in the way organizational policies that support WLB are implemented. The implementation of policies should be monitored in order to achieve a satisfactory level of consistency in their application across the organization.
- Mangers have a key role to play to ensure the success of a work-life balance approach. It is important that their views are sought with regard to work-life issues and that they are encouraged to take ownership of the process. This could be achieved by conducting a series of focus groups with them that could also serve as a forum for sharing ideas, concerns, information and good practice on work-life balance.
- For employees who like dancing, painting training camp can be organized for them as well as competitive programs can also be organized so that they can explore their talent as well as enjoy on weekends.
- Family engagement programs should be organized by the organization so that employees meet each other family which sometimes proves beneficial as employees learn to balance his/ her work & personal life by seeing other person balancing it.
- Yoga classes & meditation facility on regular basis should be provided for employees to increase their physical & mental strength.

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**ANDROID HUMANOID ROBOT - (HRP-4C)**

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**ABSTRACT**

*This paper presents an overview of our work towards Android Humanoid Robots specifically HRP-4C that can work alongside people as cooperative teammates in dancing demos. We present our theoretical framework based on a novel constructional components necessary for the real movement task to respond to the human speech on the basis of speech recognition and demonstrate its use to allow a human to work cooperatively as a dancing team for various dance performances. Such issues must be addressed to enable many new and exciting applications for humanoid robots that require them assist ordinary people in daily activities or to work as capable members of human-robot teams.*

**KEYWORDS**

Android, Humanoid Robots , HRP-4C, Speech recognition, Movements of human.

**INTRODUCTION**

**H**RP-4C<sup>[3]</sup> is a female humanoid robot<sup>[2]</sup>, created by the National Institute of Advanced Industrial Science and Technology -a Japanese research facility. It can move like a human and responds based on speech recognition<sup>[4]</sup>. It is capable of recognizing ambient sounds and, by using the vocal synthesizer ,Vocalic, can sing.The HRP-4C<sup>[3]</sup> has a realistic head, and the average figure of a young Japanese female. Recent upgrades have allowed HRP-4C<sup>[3]</sup> to mimic human facial and head movements, as well as execute dance steps, resulting in the most realistic performance yet.

**CONSTRUCTIONAL TECHNOLOGIES**

HRP-4C<sup>[3]</sup> was efficiently developed based on the User Centered Robot Open Architecture utilizing the fundamental Robot Technologies (RTs) including Real-time Linux, RT middleware, Robot Simulator OpenHRP3, Speech Recognition<sup>[4]</sup> and Bipedal walking technology. HRP-4C<sup>[3]</sup> is expected to be useful in the entertainment industry, for device evaluation for humans working as human simulators, and mechanical products to assist human movements by incorporating the following new functions and features:

**FIGURE 1**

1. Looks like a human being with a height of 158 cm and body weight of 43 kg (including the battery), and the positions of the joints and dimensions are set to the average values for young Japanese females in the "Japanese Body Dimension Database 1997 – 98."
2. To closely mimic the movements of humans, there are 3 degrees of freedom in the hip, 3 in the neck and 8 in the face.
3. By adopting the walking control technology developed in HRP and motion-captured human movements for reference, the robot walks and moves very much like a human being.
4. The speech recognition<sup>[4]</sup> component of RT middleware, which is installed in the computer in the head section, recognizes human speech and the robot can respond in various ways.

Furthermore, HRP-4C<sup>[3]</sup> inherits the technologies of HRP-2 and utilizes patented technology of Honda Motor Co. Ltd.

**DESIGN OF APPEARANCE**

The complete set of appearance with design constraints can be discussed as:

**Head Joints**

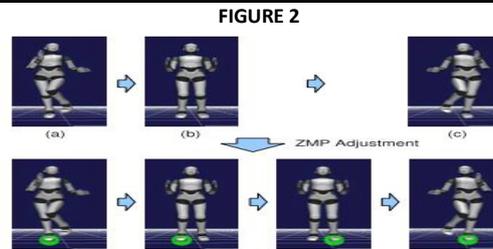
HRP-4C<sup>[3]</sup> has 8 actuators in its head and accordingly can make facial expressions. To realize a head size close to the average young female , there is need to limit the number of degree of freedom(DOF) of the head. Due to this, HRP-4C<sup>[3]</sup> can not perform some facial expressions like winking but can show smile , surprise , anger etc.

**Hand Joints**

The designing of hands of HRP-4C<sup>[3]</sup> to create motion in dance performance is again limited to minimum DOF. The four fingers from the index to the little fingers are driven by one servomotor and the thumb is driven by another.

**Towards Human like Walking and Motion**

A couple of algorithms have been developed to generate human-like motion and walking from mocap data. The robot has been associated with a special software tool having control mechanism to stabilize a humanoid robot motion. It can be used to quickly create the motion through an interactive user interface. The software is based on the computation concept named **Zero Moment Point (ZMP)** to detect poses that are unstable.



User can freely design the key poses. If a pose is not stable, the software automatically detects that the pose is a problem and modifies it. And if user doesn't like the "corrected" pose then, can choose another pose and keep trying until satisfied with the movements. Thus, software automatically adds a key pose needed to maintain stability.

#### **Interaction using Speech Recognition**

In the technology of HRP-4C<sup>[3]</sup>, an open source speech recognition<sup>[4]</sup> engine named **Julian** is used. It runs on the CPU embedded on the head of it. To realize robust recognition against ambient noise, an operator uses wireless Bluetooth microphone to send voice commands. The recognition result is transmitted to motion control software running on other CPU in the body of HRP-4C via RT Middleware. In the given figure, the operator is speaking voice command – "Look Surprised" and accordingly HRP-4C<sup>[3]</sup> demonstrated the surprise motion.

#### **CONCLUSION AND FUTURE WORK**

In this paper, there is an overview about android humanoid robot HRP-4C<sup>[3]</sup>. The robot has the appearance and shape of a real human being, specially, an average young Japanese female. It can perform biped walk using its own battery and can interact with humans using speech recognition<sup>[4]</sup>. It is expected to be used in the entertainment industry such as for exhibitions and fashion shows. Since its appearance and shape are human-like, it can be also used as a human simulator to evaluate devices....

The software of HRP-4C<sup>[3]</sup> is still under development for the project, was carried out with a tight schedule. One of the urgent goal is to realize a reliable human-like biped walking with stretched knees.

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**STUDY OF IFRS AND HARMONIZATION WITH COUNTRY SPECIFIC ACCOUNTING STANDARD**

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**ABSTRACT**

*The study find that IFRS has not yet been implemented in all the industries of India, very few industries like Infosys, Larsen & Turbo etc had adopted IFRS but it is expected that all the Indian companies will implement or adopt IFRS within 2016. In case of other countries of the world the condition is same, very few countries of the world only adopt IFRS, those are basically European countries. It will take 10 to 20 years for adopting IFRS by more or less all the countries of the world. One thing, important to say that in case of each countries including India, a coordinated effort from accountants to law makers is needed along with an enforcement mechanism but it is worthy to mention that only enforcement mechanism will not be sufficient but and advisor is also required. Now as far as project is concerned, it has been mentioned under limitations of the project in introduction part, that the project faced a great limitation due to non availability of primary data and which affects analysis and findings for which the objectives of the project is not totally fulfilled. It can never be say that any project on IFRS can't be successful totally, it will but not possible for me as because collection of primary data from firms, industries and supreme accounting & financial authority of those far way countries is not possible due to huge cost, time and confidentiality constraint for me. Indian companies also did not provide data to me because non-published IFRS related data is very confidential to them, as each have own confidential strategy for IFRS implementation, which they will not tell to us until they publicly publish it. Moreover collection of primary data is possible for large organisations like Zhou et al, Siqi Li who also carry out project on this subject as they have negligible time and cost constraint and as they are huge and naming organisations many industries provide them there unpublished data. They work on some primary data therefore there project is more successful than me.*

**KEYWORDS**

IFRS, accounting standards.

**INTRODUCTION****INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)**

IFRS is a set of accounting standards developed by an independent, non-profit organisation, called the IASB to provide a global framework for how public companies prepare and disclose their financial statements.

Globalisation of financial markets has meant an increased focus on international standards in accounting and has intensified efforts towards a single set of high quality globally acceptable set of accounting standards. Financial statements prepared in different countries according to different set of rules, mean numerous national sets of standards, each with its own set of interpretation about a similar transaction, making it difficult to compare, analyse and interpret financial statements across the nations.

The pace of development in financial reporting has accelerated sharply during the last few years, especially since the decision of the European Commission to force the consolidated financial statements of listed companies to be prepared under the auspicious of the IASB from 2005 onwards, which has sole responsibility for establishing IFRSs. Other components of the structure are the Trustees of the IASC Foundation, the IFRIC and the SAC.

Country specific accounting standards mean, those separate sets of accounting standards that were developed by particular authority of that particular country and used only by that country for the preparation and presentation of the financial statements is known as Indian Accounting Standards and it is developed by the authority named ICAI.

**NEED OF THE SUTDY**

In present day context we came across various opportunities that IFRS delivers to those institutions and organisations who had already adopted the IFRS as a means of their financial statements preparation and presentation by replacing their own country specific accounting standards by IFRS. Opportunities delivers to those institutions by IFRS are as follows :

1. Industries those who had already adopted IFRS get an opportunity in better accessing to global capital markets.
2. They get an opportunity of comparing their financial statements with the financial statements of the same type of industries of other countries.
3. They get rid of multiple reporting task. They prepare and present accounts according to IFRS so they need not required to prepare and present their accounts as per various accounting standards of various countries and thus relieved from the strenuous job of multiple reporting.
4. Companies who had already adopted IFRS get an opportunity in respect of easy cross border listing.
5. Those companies who had already adopted IFRS enjoy an edge over the other companies of same industry who not yet adopt IFRS, in respect of various business aspects or matters.

Thus, it is more or less clear from the above discussion that IFRS gain immense importance in present day in the whole world in respect of preparation and presentation of financial statements of various industries all over the world.

So, a close and deep study of this subject is very much necessary at present, to gain or gather more knowledge and idea about its various aspects.

Thus, IFRS indirectly play an important role in the augmentation of the world economy through its implementation in various industries of the world.

Hence it becomes a very important topic for discussion and study, at present in the whole world.

**OBJECTIVES OF THE STUDY**

The objectives of the study are as follows:-

1. The one of the main objective of the study is to see how far the IFRS has been successfully implemented in different countries of the world, through implementation in the industries of those countries.
2. To see specially, how far India has been successful in implementing IFRS in various Indian industries.
3. To see how far ICAI achieves in proper merging IFRS with Ind AS.
4. To see what are the advantages of respective country specific accounting standards which stand in the way of proper implementation of IFRS in various countries.
5. To see shortcomings of the country specific accounting standards.
6. To see what are the advantages of IFRS reaped by those companies who already adopted IFRS.
7. To see what are the drawbacks of IFRS which acts as an difficulties or obligations, in smooth implementation of IFRS to the companies who are trying to implement IFRS.
8. To find out causes behind smooth implementation of IFRS in one country and causes behind non smooth implementation of IFRS in another country.

**METHODOLOGY**

Our study has been totally conducted on the basis of secondary data as collection of primary data is not at all possible for me due to huge time, cost and confidentiality constraints and also due to my negligible identity companies or institutions refused to give me their primary data on the basis of confidentiality ground. We collect data from various books journals and articles published by various supreme accounting authorities of different countries and by different individuals and non-profit organisations who either deals or research with this subject and who previously conducted study on this subject. Again data is also collected from various articles published by various companies who either already adopted IFRS or going to adopt IFRS. Information that they published through articles is basically about that procedure they had adopted for its smooth implementation, that challenges the faced during implementation, benefits reaped from its successful implementation etc.

**Now on the basis of above data, analysis has been conducted to find out the following:-**

1. How far IFRS has been implemented in world and in India and extent of its implementation in various countries are expressed in terms of percentage and at present how far it can conquer the world is represented diagrammatically.
2. Causes behind smooth implementation of IFRS in one country and non smooth implementation of IFRS in another country.
3. To make a comparative study between two sets of ratio and findings out of reasons for difference in the value of a same ratio of two set, computed from data available in two financial statements for the year 2013 one is prepared as per IFRS and another is prepared as per Ind AS.
4. To find out obstacles faced by different companies and countries in IFRS adoption, how they overcome those obstacles and benefits reaped for IFRS adoption.

**BRIEF REVIEW OF LITERATURE**

As mentioned earlier, the available literature on IFRS and its implementation covers the data from European Union. Few studies have been carried out analysing the data from other countries. Zhou et al (2009) in one such study of Chinese firms' data concluded that the firms adopting IFRS are less likely to smooth earnings in the post IFRS adoption period. Their findings also pointed out the need for a stricter enforcement mechanism of financial reporting standards in emerging markets. Working on the data of European firms Armstrong et al (2010) found out a positive reaction to IFRS adoption events for firms with high quality pre adoption information, consistent with investors expecting net convergence benefits from IFRS adoption. In his study of 1084 European Union firms during the period of (1995-2006), Siqi Li (2010) concluded that on average the IFRS mandate significantly reduces the cost of equity for mandatory adopters. He also suggested in his research that this reduction is present only in countries with strong legal enforcement and that increased disclosures and enhanced information comparability are two mechanisms behind the cost of equity reduction. Cai & Wong (2010) in their study of their global capital markets summarized that the capital markets of the countries that have adopted IFRS have higher degree of integration among them after IFRS adoption as compared to the period before the adoption. Paananen & Lin (2009) gave a contrary view to prior research that IFRS adoption ensures better quality of accounting information. Their analysis of German companies reporting showed that accounting information quality has worsened with the adoption of IFRS over time. They also suggested that this development is less likely to be driven by new adopters of IFRS but is driven by the changes of standards. Books and articles published regarding the topic of the project are a) (IFRSs), produced and printed on behalf of : ICAI, b) (IFRSs) – published by Taxman Publications P Ltd. c) A guide through IFRSs July, 2008 – Published by IASB. d) IFRS : A Quick Reference Guide by Robert Kirk, etc.

**LIMITATIONS OF THE WORK**

The major limitations that I have to face while carrying out the work or study for the project are as follows:

1. The main problem that crop up while carrying out this project is non-availability of proper and adequate data. Primary data is not at all available because its access is restricted to the supreme accounting authorities of different countries and to different business houses who carry out research or deal with it. It is not at all possible for me to go and collect primary data from them due to huge time, cost and confidentiality constraint and also due to negligible identity constraint. Carrying of a project, basing on the primary dat can never make the project fully successful.
2. Another main problem in carrying out these project is, that as these has been successfully implemented in very few countries of the world and most of the countries of the world and most of the countries not yet adopt it either fully or even partially, it lacks popularity. Very few people have knowledge about it. Data published by those knowledgeable persons is very small and those who works on or with it, works very quietly and does not publish up to date information about their progress. For all these reasons availability of data or information regarding it is ery small and negligible, so it also act as a limitation or obstacle in the path of successful conduct of the project.
3. Data problem affect the analysis for which findings are also affected and due to these objectives of the project is not fully achieved.
4. As only one Indian company prepare financial statements according to both IFRS and Ind AS so comparative analysis between the same ratios, computed on the basis of data available in the two financial statements, prepared according to or in compliance with two different sets of standards, cannot be properly done.
5. As up to date data regarding IFRS implementation in various countries is not properly available, it becomes a great problem to find out and expressed in terms of percentage how many countries of different continents become successful in implementing IFRS, so it is also not possible to determine accurately how far IFRS has been implemented or adopted in the whole world. Determination of these is an objective of the project and as it can't be properly or accurately determined it is also a limitation of the project.

**IFRS STRUCTURE**

The International Accounting Standard Committee (IASC) Foundation is an independent body that overseas the International Accounting Standard Board (IASB), The IASC appoints Standard Advisory Council, The IASB and International Financial Reporting Interpretations Committee (IFRIC).

1. IASB consists of 14 members for the initial term of three to five years. IASB is responsible for technical matters including :-
  - Preparation and issue of exposure draft,
  - Setting up procedures for reviewing comments received on documents published for comments
  - Issuing bases for conclusions.
2. Standard Advisory Council (SAC) consists of 40 members appointed by IASC Foundation trustees. They are appointed for a renewable terms of three years with a diverse geographic and functional background. SAC meets in public at least three times a year with IASB. Their main objectives are to advice the IASB on agenda decisions, to pass views of the council members on the major standard setting project and other works.
3. IFRIC consists of accounting experts from 12 countries appointed by trustees. The main objects of IFRIC are to develop conceptually sound and practicable interpretations of IFRSs to be applied on a global basis :-
  - for newly identified financial reporting issues not specifically addressed in IFRSs.
  - Where unsatisfactory, conflicting, divergent or other unacceptable interpretations have develop or seem likely to develop in the absence of authoritative guidance. There are total 19 IFRICs have been issued till date.

**NATIONAL AND INTERNATIONAL SCENARIO**

IFRS is use in many parts of the world, including the European Union counties, India, Hong Kong, Australia, Malaysia, Pakistan, Russia, South Africa, Singapore, Turkey etc. As on August 2008, more than 113 countries around the world, including all of Europe, currently require or permit IFRS reporting and 85 require IFRS reporting for all domestic listed companies. In 2013, around 130 countries of the world permit or currently require IFRS reporting.

**FEATURES OF IFRS**

1. IFRS has been developed and issued by IASB.
2. IFRS is a global accounting standards prepared after considering the respective accounting standards of all the countries.
3. It is more complex than the Ind. AS.
4. IFRS has immense contribution in the augmentation of world economy.
5. It's adoption is not large due to lack of knowledge about it, amount the accountants of different countries all over the world.
6. Total number of IFRS (including those effective from 1.1.2013) is 66, of which 13 IFRS, 28 IAS, 16 IFRIC interpretations and 9 SIC interpretations.

**ADVANTAGES OF IFRS**

1. It provides opportunity or benefit in respect of better access to global capital markets.
2. It provides benefit in respect of easier global comparability.
3. It provides benefits in respect of easy cross border listing, elimination of multiple reporting and augmentation of business.
4. It makes a company multinational.

**DISADVANTAGES OF IFRS**

1. As IFRS is a new concept, most of the accountants all over the world has less knowledge about it and so they are less accustomed with it, hence they prefer to prepare accounts with their own country accounting standards and show no interest to adopt IFRS in preparation of accounts for which IFRS adoption get a setback.
2. The IFRS is very vast and complex, it has large number of standards, proper implementation of it requires knowledgeable persons in a concern, which always lack in a concern, for which it's complete and proper implementation in different companies of the world is rare.
3. Accountants and other persons of a company are needed to be properly trained for imparting adequate knowledge about IFRS, before implementation IFRS so that those trained accountants can implement IFRS in the concern but this training involves huge amount of money.

**COMPARISON BETWEEN IAS & IFRS****GENERAL DIFFERENCES**

- Different terminology is used in Ind AS e.g. the term 'balance sheet' is used instead of 'Statement of financial position' and 'Statement of Profit and Loss' is used instead of 'Statement of comprehensive income'. The words approval of the financial statements for issue' have been used instead of authorisation of the financial statements for issue' in the context of financial statements considered for the purpose of events after the reporting period.
- The transitional provisions given in IFRS have not been given Ind AS, since all transitional provisions related to Ind AS, wherever considered appropriate, have been included in Ind AS 101 First-time Adoption of Indian Accounting Standards.
- Under Ind AS, IFRIC and SIC have not been issue separately from Ind AS but included as an appendix to Ind AS.
- The Ind AS is a country specific accounting standard. IFRS is a global accounting standard.
- Accounts prepared as per Ind AS need multiple reporting. Accounts prepared as per IFRS are prepared considering global circumstances.
- IFRS 1 defines transitional date as beginning of the earliest period for which an entity presents full comparative information under IFRS. It is this date which is the starting point for IFRS and it is on this date the cumulative impact of transition is recorded based on assessment of conditions at the date by applying the standards retrospectively except to the extent specifically provided in this standard as optional exemptions and mandatory exceptions. Ind-As 101, however, provides that the date of transition is the beginning of the current period and in addition provides an option to present comparative financial statements in accordance with Ind-AS on a memorandum basis.
- IFRS 3 requires bargain purchase gain arising on business combination to be recognised in profit or loss. Ind AS 103 requires the same to be recognised in other comprehensive income and accumulated in equity as capital reserve, unless there is no clear evidence for the underlying reason for classification of the business combination as a bargain purchase, in which case, it shall be recognised directly in equity as capital reserve. This has consequential changes such as change in wording of paragraphs 34 and 36, paragraphs IE47 and IE48 of illustrative examples, additional disclosure in paragraph B64(n) and addition of new paragraph 36A.
- IFRS 1 defines previous GAAP as the basis of accounting that a first-time adopter used immediately before adopting IFRS. Ind-AS 101, however, defines previous GAAP as the basis of accounting that a first-time adopter used immediately before adopting Ind-AS for complying with the reporting requirements in India.
- Paragraph 22 of IFRS 1 requires specific disclosures if the entity provides non-IFRS comparative information and historical summaries. Such disclosures are not required under Ind-AS 101.
- Paragraph B2 of IFRS 1 provides that, an entity would have had to adopt the de-recognition requirements for transactions entered after 1<sup>st</sup> January, 2004. However, for Ind-AS 101 purposes, all these dates have been changed to coincide with the transition date elected by the entity adopting these converged standards i.e. Ind-AS.
- IFRS requires reconciliations for opening equity, total comprehensive income, cash flow statement and closing equity for the comparative period to explain the transition to IFRS from previous GAAP. Ind-As 101, provides an option to provide comparative period financial statements on memorandum basis. Accordingly, entities that do not provide comparatives need not provide reconciliation for total comprehensive income, cash flow statement and closing equity in the first year of transition but are expected to disclose significant differences pertaining total comprehensive income. Entities that provide comparatives would have to provide reconciliations which are similar to IFRS.

**GENERAL SIMILARITY**

- Both deals with provisions regarding preparation and presentation of financial statements.
- Both consists of set of standards.
- Presentation of any items of income or expenses as extraordinary is prohibited under the both.
- When comparative amounts are reclassified, nature, amount and reason for reclassification are disclosed under the both.
- In case of inventories no specific classification requires classification should be appropriate to the entity under the both.
- Both acting as a framework for preparation and presentation of financial statements
- Under both, omissions or misstatements are material if individually or collectively they could influence the economic decisions that users take on the basis of financial statements.
- Both requires disclosure of critical judgements made by management in applying accounting policies.
- Both requires disclosure of information about management of capital and compliance with capital requirements.
- Under both, difference between the purchase price of inventories for normal credit terms and the amount paid for deferred settlement terms is recognised as interest expense.
- Under both, Changes in ownership interest in a subsidiary without loss of control are treated as financing activities

**SOME NOTES ON IFRS****IFRS – 1 – FIRST-TIME ADOPTION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS**

The objective of this IFRS is to ensure that an entity's first IFRS financial statement and its financial reports for part of the period covered by those financial statements, contain high quality information that: (a) is transparent for users and comparable over all periods presented; (b) provides a suitable starting point for accounting under International Financial Reporting Standards; and (c) can be generated at a cost that does not exceed the benefits to users.

An entity shall use the accounting policies in its opening IFRS balance sheet and throughout all periods presented in its first IFRS financial statements. An entity's estimates under IFRS at the date of transition to IFRS shall be consistent with estimates made for the same date under previous GAAP, unless there is objective evidence that those estimates were in error. An entity shall explain how the transition from previous GAAP to IFRSs affected its reported financial position, financial performance and cash flows.

**IFRS – 2 – SHARE-BASED PAYMENT**

Entities often grant shares or share option to employees or other parties. An entity shall recognize the goods or services received or acquired in a share-based payment transaction when it obtains the goods or as the services are rendered. The entity shall recognize a corresponding increase in equity if the goods or services were received in an equity-settled share-based payment transaction, or a liability if the goods or services were acquired in cash settled share based payment transaction. When the goods or services received or acquired in a share-based payment transaction do not qualify for recognition as assets, they shall be recognized as expenses. For equity settled share based payment transactions, the entity shall measure the goods or services received, and the corresponding increase in equity directly, at the fair value of the goods or services received, unless that fair value cannot be estimated reliably. For cash-settled share-based payment transactions, the entity shall measure the goods or services acquired and the liability incurred at the fair value of the liability. For share-based payment transactions in which the terms of the arrangement provide either the entity or the counterparty with the choice of whether the entity settles the transaction in cash (or other assets) or by issuing equity instruments, the entity shall account for that transaction, or the components of that transaction, as a cash-settled share-based payment transaction if, and to the extent that, the entity has incurred a liability to settle in cash or other assets, or as an equity-settled share-based payment transaction if, and to the extent that, no such liability has been incurred.

**IFRS – 3 – BUSINESS COMBINATIONS**

The objective of this IFRS is to specify the financial reporting by an entity when it undertakes a business combination. The acquirer is the combining entity that obtains control of the other combining entities or businesses. The acquirer shall measure the cost of a business combination as the aggregate of:

(a) the fair values, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued by the acquirer, in exchange for control of the acquire; plus; (b) any costs directly attributable to the business combination.

The acquirer shall at the acquisition date : (a) recognize goodwill acquired in a business combination as a asset; and (b) initially measure that goodwill at its cost, being the excess of the cost of the business combination over the acquirer's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities.

**IFRS – 4 – INSURANCE CONTRACTS**

The objective of this IFRS is to specify the financial reporting for insurance contracts by any entity that issues such contracts until the Board completes the second phase of its project on insurance contracts.

An insurer shall assess at each reporting date whether it's recognized insurance liabilities are adequate, using current, estimates of future cash flows under its insurance contracts. If that assessment shows that the carrying amount of its insurance liabilities is inadequate in the light of the estimated future cash flows, the entire deficiency shall be recognized in profit or loss. An insurer shall disclose information that identifies and explains the amounts in its financial statements arising from insurance contracts. An insurer shall disclose information that helps users to understand the amount, timing and uncertainty of future cash flows from insurance contracts.

**IFRS – 5 – NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS**

The objective of this IFRS is to specify the accounting for assets held for sale, and the presentation and disclosure of discontinued operations. An entity shall classify a non-current asset (for disposal group) as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use. An entity shall measure a non-current asset (or disposal group) classified as held for sale at the lower of its carrying amount and fair value less costs to sell. An entity shall present and disclose information that enables users of the financial statements to evaluate the financial effects of discontinued operations and disposals of non-current assets (or disposal groups).

**IFRS – 6 – EXPLORATION FOR AND EVALUATION AND MINERAL RESOURCES**

The object of this IFRS is to specify the financial reporting for the exploration for and evaluation of mineral resources. Exploration and evaluation assets shall be assessed for impairment when facts and circumstances suggest that the carrying amount of an exploration and evaluation asset may exceed its recoverable amount. An entity shall determine and accounting policy for allocating exploration and evaluation assets to cash-generating units or groups of cash-generating units for the purpose of assessing such assets for impairment. An entity shall disclose information that identifies and explains the amounts recognized in its financial statements arising from the exploration for and evaluation of mineral resources.

**IFRS – 7 – FINANCIAL INSTRUMENTS: DISCLOSURES**

IFRS 7 deals with the disclosure requirement in relation to all risks arising from financial instruments (with limited exemptions), and applies to any entity that holds financial instruments. The level of disclosure required depends on the extent of the entity's use of financial instruments and its exposure to financial risk

**IFRS – 8 – OPERATING SEGMENTS**

IFRS 8 applies to the separate or individual financial statements of an entity whose debt or equity instruments are traded in a public market; or that files, or is in the process of filing, its (consolidated) financial statements with a securities commission or other regulatory organisation for the purpose of issuing any class of instruments in a public market.

IFRS 8 requires an entity to report financial and descriptive information about its reportable segments. An entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates.

**IFRS – 9 – FINANCIAL INSTRUMENTS**

An entity shall recognize a financial asset in its statement of financial position when, the entity becomes party to the contractual provisions of the instrument. A financial asset shall be measured at amortised cost when the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows and the contractual terms of the financial asset give rise to specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. A financial asset shall be measured at fair value unless it is measured at amortised cost.

**CONVERGENCE OF INDIAN ACCOUNTING STANDARDS WITH INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)**

International Financial Reporting Standards are now becoming universal reporting language. In tune with the global trend the Government of India decided to facilitate the convergence of the Indian Accounting Standards with IFRS by 1<sup>st</sup> April 2011. In this direction all the existing Indian Accounting Standards are being revised and converged with corresponding to International Accounting Standards / International Financial Reporting Standards. These converged Accounting Standards shall be known as Ind AS. As a result of this there shall be two separate sets of Accounting Standards under Section 211(3C) of the Companies Act, 1956. The first set would comprise the Indian Accounting Standards. The specified classes of companies would be – Road Map I – Phase I – (i) NSE-Nifty 50 and BSE-Sensex 30 companies; (ii) Companies listed in overseas stock exchanges; (iii) Companies with net worth above Rs.1000 crore : Phase II: Companies whether listed or not having a net worth exceeding Rs.500 crore but not above Rs.1000 crore; Phase III: Listed companies having a net worth of Rs.500 crore or less; Road Map II – Phase I: All insurance companies; Phase II: (a) NSE-Nifty 50 or BSE-Sensex 30 NBFCs and NBFCs, listed or not, having a net worth above Rs.1000 crore; (b) Scheduled commercial banks and urban co-operative banks with net worth net worth above Rs.300 crore; Phase III: Urban co-operative banks having a net worth in excess of Rs.200 crore but not exceeding Rs.300 crore.

The second set would comprise the existing Indian Accounting Standards and would be applicable to other companies, including Small and Medium Companies (SMC).

The Ministry of Corporate Affairs has notified convergence of 35 Indian Accounting Standards with International Financial Reporting Standards (henceforth called Ind AS)

**NOTE 1 - IND AS 101 COMPARISON WITH IFRS 1 FIRST-TIME ADOPTION OF INTERNATIONAL ACCOUNTING STANDARDS**

Ind-AS 101 specifies that an entity's first Ind-AS financial statements are the first annual financial statements in which the entity adopts Ind-ASs in accordance with Ind-ASs notified under the Companies Act, 1956 whereas IFRS 1 provides various examples of first IFRS financial statements.

- IFRS 1 defines transitional date as beginning of the earliest period for which an entity presents full comparative information under IFRS. It is this date which is the starting point for IFRS and it is on this date the cumulative impact of transition is recorded based on assessment of conditions at that date by applying the standards retrospectively except to the extent specifically provided in this standard as optional exemptions and mandatory exceptions.

Ind-AS 101, however, provides that the date of transition is the beginning of the current period and in addition provides an option to present comparative financial statements in accordance with Ind-AS on a memorandum basis.

Arising from this fundamental change, there are other consequential changes to Ind-AS 101. For example, disclosures required under paragraph 21 and reconciliations under paragraphs 24 to 26, Ind-AS 101 have been modified to accommodate this option available under Ind-AS 101. In addition, these have been modified to include the latest corresponding previous periods' financial statements as per the previous GAAP when presenting its first Ind-AS financial statements. The relevant Implementation Guidance and illustrative examples have been appropriately modified to reflect the option provided to transitioning entities.

- IFRS 1 defines previous GAAP as the basis of accounting that a first-time adopter used immediately before adopting IFRS. Ind-AS 101, however, defines previous GAAP as the basis of accounting that a first-time adopter used immediately before adopting Ind-AS for complying with the reporting requirements in India.

The change makes it mandatory, except where the previous financial statements were prepared as per IFRS, for Indian entities to consider the financial statements prepared in accordance with existing notified Indian accounting standards as was applicable to them as previous GAAP when it transitions to Ind-AS.

- Paragraph 22 of IFRS 1 requires specific disclosures if the entity provides non-IFRS comparative information and historical summaries. Such disclosures are not required under Ind-AS 101.
- IFRS requires reconciliations for opening equity, total comprehensive income, cash flow statement and closing equity for the comparative period to explain transition to IFRS from previous GAAP.

Ind-AS 101, provides an option to provide comparative period financial statements on memorandum basis. Accordingly, entities that do not provide comparatives need not provide reconciliation for total comprehensive income, cash flow statement and closing equity in the first year of transition but are expected to disclose significant differences pertaining to total comprehensive income. Entities that provide comparatives would have to provide reconciliations which are similar to IFRS.

**NOTE 2 - IND AS 103 - COMPARISON WITH IFRS 3 BUSINESS COMBINATIONS**

- IFRS 3 excludes from its scope business combinations of entities under common control. Ind AS 103 (Appendix C) gives the guidance in this regard. Consequently, paragraph 2 has been modified in Ind AS 103. Further, paragraphs B1-B4 of IFRS 103 have been deleted in Ind AS 103.

- IFRS 3 requires bargain purchase gain arising on business combination to be recognised in profit or loss. Ind AS 103 requires the same to be recognised in other comprehensive income and accumulated in equity as capital reserve, unless there is no clear evidence for the underlying reason for classification of the business combination as a bargain purchase, in which case, it shall be recognised directly in equity as capital reserve. This has some consequential changes such as change in wording of paragraphs 34 and 36, paragraphs IE-47 and IE-48 of illustrative examples, additional disclosure in paragraph B64(n) and addition of new paragraph 36A.

**NOTE 3 - IND AS 107 - COMPARISON WITH IFRS 7 FINANCIAL INSTRUMENTS DISCLOSURES**

- Requirements regarding disclosure of description of gains and losses presented in the separate income statement, where separate income statement is presented, have been deleted. This change is consequential to the removal of option regarding two statement approaches in Ind AS 1 as compared to IAS 1. Ind AS 1 requires that the components of profit or loss and components of other comprehensive income shall be presented as a part of the statement of profit and loss.

**NOTE 4 - IND AS 1 - COMPARISON WITH IAS 1 PRESENTATION OF FINANCIAL STATEMENTS**

- With regard to preparation of Statement of profit and loss International Accounting Standard (IAS) 1, Presentation of Financial Statements, provides an option either to follow the single statement approach or to follow the two statement approach. While in the single statement approach, all items of income and expense are recognised in the statement of profit and loss, in the two statements approach, two statements are prepared, one displaying components of profit or loss (separate income statement) and the other beginning with profit or loss and displaying components of other comprehensive income. Ind AS 1 allows only the single statement approach.
- IAS 1 requires preparation of a Statement of Changes in Equity as a separate statement. Ind AS 1 requires the statement of changes in equity to be shown as a part of the balance sheet.
- IAS 1 gives the option to individual entities to follow different terminology for the titles of financial statements. Ind AS 1 is changed to remove alternatives by giving one terminology to be used by all entities.
- IAS 1 permits the periodicity, for example, of 52 weeks for preparation of financial statements. However, Ind AS 1 does not permit it.

**NOTE 5 - IND AS 7 - COMPARISON WITH IAS 7 STATEMENT OF CASH FLOWS :-**

- In case of other than financial entities, IAS 7 gives an option to classify the interest paid and interest and dividends received as item of operating cash flows. Ind AS 7 does not provide such an option and requires these items to be classified as item of financing activity and investing activity; respectively IAS 7 gives an option to classify the dividend paid as an item of operating activity. However, Ind AS 7 requires it to be classified as a part of financing activity only.

**NOTE 6 - IND AS 11 - COMPARISON WITH IAS 11 CONSTRUCTION OF CONTRACTS, IFRIC 12 SERVICE CONCESSION ARRANGEMENTS AND SIC 29 SERVICE CONCESSION ARRANGEMENTS: DISCLOSURES**

- IAS 11 does not deal with accounting for construction contracts in respect of real estate developers. However, this has been dealt with under Ind AS 11, since it has been kept out of the scope of Ind AS 18, Revenue.

**NOTE 7 - IND AS 19 - COMPARISON WITH IAS 19 EMPLOYEE BENEFITS**

- IAS 19 permits various options for treatment of actuarial gains and losses for post-employment defined benefit plans whereas Ind AS 19 requires recognition of the same in other comprehensive income, both for post-employment defined benefit plans and other long-term employment benefit plans. The actuarial gains recognised in other comprehensive income should be recognised immediately in retained earnings and should not be reclassified to profit or loss in a subsequent period. Changes consequent to the aforesaid have been made in the other paragraphs, including addition of a new paragraph 129A.
- Ind AS 19 unlike IAS 19 gives guidance that detailed actuarial valuation of defined benefit obligations may be made at intervals not exceeding three years.

**NOTE 8 - IND AS 20 - COMPARISON WITH IAS 20 ACCOUNTING FOR GOVERNMENT GRANTS AND DISCLOSURE OF GOVERNMENT ASSISTANCE**

- IAS 20 gives an option to measure non-monetary government grants either at their fair value or at nominal value. Ind AS 20 requires measurement of such grants only at their fair value. Thus, the option to measure these grants at nominal value is not available under Ind AS 20.
- Ind AS 20 gives an option to present the grants related to assets, including non-monetary grants at fair value in the balance sheet either by setting up the grant as deferred income or by deducting the grant in arriving at the carrying amount of the asset. Ind AS 20 requires presentation of such grants in balance sheet only by setting up the grant as deferred income. Thus, the option to present such grants by deduction of the grant in arriving at the carrying amount of the asset is not available under Ind AS 20.

**NOTE 9 - IND AS 21 - COMPARISON WITH IAS 21 THE EFFECTS OF CHANGES IN FOREIGN EXCHANGE RATES :-**

- Ind AS 21 permits an option to recognise exchange differences arising on translation of certain long-term monetary items from foreign currency to functional currency directly in equity. In this situation, Ind AS 21 requires the accumulated exchange differences to be transferred to profit or loss in an appropriate manner. IAS 21 does not permit such a treatment.
- When there is a change in functional currency of either the reporting currency or a significant foreign operation, IAS 21 requires disclosure of that fact and the reason for the change in functional currency. Ind AS 21 requires an additional disclosure of the date of change in functional currency.

**NOTE 10 - IND AS 27 - COMPARISON WITH IAS 27 CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS**

As per Para 10 of IAS 27, a parent need not present consolidated financial statements if and only if:

- the parent is itself a wholly-owned subsidiary, or is a partially-owned subsidiary of another entity and its other owners, including those not otherwise entitled to vote, have been informed about, and do not object to, the parent not presenting consolidated financial statements;
- the parent's debt or equity instruments are not traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets);
- the parent did not file, nor is it in the process of filing, its financial statements with a securities commission or other regulatory organisation for the purpose of issuing any class of instruments in a public market.

**NOTE 11 - IND AS 28 - COMPARISON WITH IAS 28 INVESTMENTS IN ASSOCIATES**

- Where the financial statements of an associate used in applying equity method are prepared as of a date different from that of the investor, IAS 28 requires that this difference should not be more than three months. However, Ind AS 28 provides that this difference should not be more than three months, unless impracticable. Similarly, Ind AS 28 requires use of uniform accounting policies, unless impracticable, which IAS 28 does not provide. These changes have been made because the investor does not have 'control' over the associate, it may not be able to influence the associate to prepare additional financial statements or to follow the accounting policies that are followed by the investor.
- Paragraph 1(b) of IAS 28 has been deleted in Ind AS 28 as the Companies Act, 1956 is not applicable to mutual funds, unit trusts and similar entities including investment linked insurance funds and, thus, this standard would not be applicable to such entities.
- Paragraphs 5, 13(b) and 13(c) have been deleted as the applicability or exemptions to the Indian Accounting Standards are governed by the Companies Act and the Rules made there under.

**NOTE 12 - IND AS 31 - COMPARISON WITH IAS 31 INTERESTS IN JOINT VENTURES**

- Paragraphs 1(b) of IAS 31 has been deleted in Ind AS 31 as the Companies Act, 1956, is not applicable to mutual funds, unit trusts and similar entities including investment linked insurance funds and, thus, this standard would not be applicable to such entities. However, paragraph number 1(b) has been retained in Ind AS 31 to maintain consistency with IAS 31.
- Sub-Paragraphs 2(b) and (c) and paragraph 6 have been deleted as the applicability or exemptions to the Indian Accounting Standards are governed by the Companies Act and the Rules made there under. However, paragraph number 6 has been retained in Ind AS 31 to maintain consistency with IAS 31. have been deleted as the applicability or exemptions to the Indian Accounting Standards are governed by the Companies Act and the Rules made there under.

**NOTE 13 - IND AS 32 - COMPARISON WITH IAS 32 FINANCIAL INSTRUMENTS PRESENTATION**

- As an exception to the definition of 'financial liability' in paragraph 11 (b) (ii), Ind AS 32 considers the equity conversion option embedded in a convertible bond denominated in foreign currency to acquire a fixed number of entity's own equity instruments is considered an equity instrument if the exercise price is fixed in any currency. This exception is not provided in IAS 32.
- Requirements regarding presentation of dividends classified as an expense in the separate income statement, where separate income statement is presented, have been deleted. This change is consequential to the removal of option regarding two statement approaches in Ind AS 1. Ind AS 1 requires that the components of profit or loss and components of other comprehensive income shall be presented as a part of the statement of profit and loss.

**NOTE 14 - IND AS 33 - COMPARISON WITH IAS 33 EARNINGS PER SHARE**

IAS 33 provides that when an entity presents both consolidated financial statements and separate financial statements, it may give EPS related information in consolidated financial statements only, whereas, the Ind AS 33 requires EPS related information to be disclosed both in consolidated financial statements and separate financial statements.

Paragraph 2 of IAS 33 requires that the entire standard applies to:

a. The separate or individual financial statements of an entity:

- Whose ordinary shares or potential ordinary shares are traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets) or
- that files, or is in the process of filing, its financial statements with a Securities Regulator or other regulatory organisation for the purpose of issuing ordinary shares in a public market; and

b. the consolidated financial statements of a group with a parent:

- Whose ordinary shares or potential ordinary shares are traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets) or
- that files, or is in the process of filing, its financial statements with a Securities Regulator or other regulatory organisation for the purpose of issuing ordinary shares in a public market.

It also requires that an entity that discloses earnings per share shall calculate and disclose earnings per share in accordance with this Standard. The above have been deleted in the Ind AS as applicability or exemptions to the Indian Accounting Standards are governed by the Companies Act and the Rules made there under.

Paragraph 4 has been modified in Ind AS 33 to clarify that an entity shall not present in separate financial statements, earnings per share based on the information given in consolidated financial statements, besides requiring as in IAS 33, that earnings per share based on the information given in separate financial statements shall not be presented in the consolidated financial statements.

In Ind AS 33, a paragraph has been added after paragraph 12 on the following lines -

"Where any item of income or expense which is otherwise required to be recognized in profit or loss in accordance with accounting standards is debited or credited to securities premium account/other reserves, the amount in respect thereof shall be deducted from profit or loss from continuing operations for the purpose of calculating basic earnings per share".

**NOTE 15 - IND AS 39 - COMPARISON WITH IAS 39 FINANCIAL INSTRUMENTS MEASUREMENT AND RECOGNITION**

- A proviso has been added to paragraph 48 of Ind AS 39 that in determining the fair value of the financial liabilities which upon initial recognition are designated at fair value through profit or loss, any change in fair value consequent to changes in the entity's own credit risk shall be ignored. IAS 39 requires all changes in fair values in such liabilities to be recognised in profit or loss.

- IAS 39 does not change the requirements relating to employee benefit plans that comply with IAS 26, Accounting and Reporting by Retirement Benefit Plans. Ind AS 39 does not mention so as IAS 26 is not relevant for companies.

**NOTE 16 - IND AS 40 - COMPARISON WITH IAS 40 INVESTMENT PROPERTY**

- IAS 40 permits both cost model and fair value model (except in some situations) for measurement of investment properties after initial recognition. Ind AS 40 permits only the cost model.
- IAS 40 requires disclosure of fair values of investment property when cost model is used. Since this requirement is retained in Ind AS 40, paragraphs 53, 53A, 53B, 54 and 55 and certain other paragraphs of IAS 40 have been modified. The modifications include substitution of fair value measurement with fair value determination/disclosure and deletion of reference to use of cost model when fair value determination is unreliable.

A. IAS 40 permits treatment of property interest held in an operating lease as investment property, if the definition of investment property is otherwise met and fair value model is applied. In such cases, the operating lease would be accounted as if it were a finance lease. Since Ind AS 40 prohibits the use of fair value model, this treatment is prohibited in Ind AS 40. As a result, paragraph 6 IAS 40 has been deleted in Ind AS 40. In addition, the expression 'investment property under a finance or operating lease' appearing in paragraph 74 of IAS 40 has been modified as 'investment property under a finance lease' in Ind AS 40.

**RECOMMENDATIONS & CONCLUSION**

IFRS implementation in India is not at all properly and completely takes place, not only India except few countries of the world, no countries not yet have been properly and completely implemented IFRS.

Merely adopting IFRS is not enough. Directors, managers internal & external auditor and accountants of the firms along with the regulators and law makers of the country will have to work together as a team for complete, proper and efficient implementation of IFRS in any country.

Directors and managers of the firms should see that the accounts are prepared in compliance with the IFRS. Regulators and law makers must implement efficient monitoring system of regulatory compliance of IFRS. Auditors and accountants should audit and prepare accounts respectively in compliance with IFRS.

**FOLLOWING ARE SOME PROCEDURES THAT SHOULD BE ADOPTED BY ALL THE COUNTRIES WHO NOT YET IMPLEMENT IFRS, FOR SMOOTH IMPLEMENTATION OF IFRS**

1. The lawmakers of India will have to make necessary changes in the Companies Act 1956, Insurance Act, Tax Laws, Foreign Exchange Management Act etc to bring Indian accounting practices in line with the IFRS.
2. For proper implementation of IFRS in a country, there requires adequate number of IFRS trained accountants and auditors, so that they can implement or adopt IFRS. Sufficient number of trained persons are lacking in most of the country so every countries who not yet adopt IFRS should consider this matter.
3. To ensure that all the firms are complying with adoption procedure, Indian law makers and Accounting Body (ICAI) should have Financial Reporting Compliance Monitoring Board.
4. Government of each country should take adequate measures for implementation of IFRS in industries of those countries.

**CONCLUSION**

It can be concluded that IFRS has not yet been implemented in all the industries of India, very few industries like Infosys, Larsen & Turbo etc had adopted IFRS but it is expected that all the Indian companies will implement or adopt IFRS within 2016. In case of other countries of the world the condition is same, very few countries of the world only adopt IFRS, those are basically European countries. It will take 10 to 20 years for adopting IFRS by more or less all the countries of the world.

One thing, important to say that in case of each countries including India, a coordinated effort from accountants to law makers is needed along with an enforcement mechanism but it is worthy to mention that only enforcement mechanism will not be sufficient but an advisor is also required.

Now as far as project is concerned, it has been mentioned under limitations of the project in introduction part, that the project faced a great limitation due to non availability of primary data and which affects analysis and findings for which the objectives of the project is not totally fulfilled.

It can never be say that any project on IFRS can't be successful totally, it will but not possible for me as because collection of primary data from firms, industries and supreme accounting & financial authority of those far way countries is not possible due to huge cost, time and confidentiality constraint for me. Indian companies also did not provide data to me because non-published IFRS related data is very confidential to them, as each have own confidential strategy for IFRS implementation, which they will not tell to us until they publicly publish it.

Moreover collection of primary data is possible for large organisations like Zhou et al, Siqi Li who also carry out project on this subject as they have negligible time and cost constraint and as they are huge and naming organisations many industries provide them there unpublished data. They work on some primary data therefore there project is more successful than me.

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## CONSUMER PREFERENCE TOWARDS PACKED WATER IN TUTICORIN

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**ABSTRACT**

*Water is the most important necessity for life. The drinking-water needs for individuals vary depending on the climate, physical activity and the body culture. but for average consumers it is estimated to be about two to four liters per day. The growing number of cases of Water-borne diseases, increasing water pollution, increasing urbanization, increasing scarcity of Clean and Safe Drinking Water Quality etc. have made the bottled water business just like other consumer items. Scarcity of potable and wholesome water at railway stations, tourists spots, and role of tourism corp. etc. has also added to the growth.*

**KEYWORDS**

Water, Disease and Health

**1. INTRODUCTION**

The increasing health consciousness of people needs of protected food and beverages. Even drinking water has become a commercial product as people want it in purified and protected form. Bottled water become internationally branded products of multi-national business giants. Bottled water is a drinking water packaged in bottles for individual consumption and retail sale. The water can be glacial water, spring water, and purified water. Many countries, particularly developed countries, regulate the quality of bottled water through government standards, typically used to ensure that water quality is safe and labels accurately reflect bottle contents. In many developing countries, however, such standards are variable and are often less stringent than those of developed nations. The overall packaged bottled water in India is estimated to touch the Rs 10,000 crore mark in the 2012-13 fiscal, growing at a compound annual growth rate (CAGR) of 19%, says a new report by Ikon Marketing Consultants. Presently, this market is estimated at Rs 8,000 crore, and could touch Rs15,000 crore by 2015, the report adds. While Bisleri continues as the top brand with a 36% share among national players, Coca-Cola's Kinley follows with 25% share, followed by Aquafina at 15%. Other smaller brands include Parle Agro's Bailley, Kingfisher and McDowells No. 1, according to the report.

**1.1 REVIEW OF LITERATURE**

Annamalai Solayappan, Jothi Jayakrishnan (2010) their research showed that branded computers play a prestigious role in the students segment. Due to the computer world everything is in the hands of the students. Everything in the world seems to be digital. Everyone needs a computer to drive a smooth and fast race. Especially, branded computers will try to safeguard the competitive race. So, the various factors discussed may determine the student to purchase branded computers.

A study by Falahee & MacRae (1995), based on blind comparisons of different waters by British students, suggests that waters with high mineral content – in this case several bottled and borehole waters – are preferred over those with low mineral concentration – i.e. distilled water and a local tap water.

A study by Johnson (2003) found that overall assessments of water supply quality or supplier performance did not change as a result of receiving different types of water quality reports, with prior general beliefs about risk being more significant than the content or format of water quality reports in influencing concern about water quality.

A similar study by Joshi et al (2002) conducted in India with water consumers who experienced relatively frequent supply interruptions also showed an ability to cope, with consumers developing routines for dealing with intermittent supplies and adapting through storage of water.

As previously noted in the literature by Bates (2000), the primary expectation that consumers have of their supplier is that they provide safe drinking water. This has been confirmed by a number of studies. For example Burn et al (2003) found the two major priorities of water consumers in Australia were quality of water supply and continuity of water supply.

**1.2 STATEMENT OF THE PROBLEM**

There are many companies offering packed/bottled water in Indian market. As the competition for the manufacturer is tough and the choices for the customers are many, consumer's preference and their behavior are very important areas for analysis in bottled water industry. In this context the researcher had chosen this topic for his study.

**1.3 OBJECTIVES OF THE STUDY**

The objectives of the study are as follows:

1. To study the customer's satisfaction towards the packed/bottled water
2. To know about the benefits of using packed/bottled water.
3. To study the preference of customers among various packed/bottled water companies.

**1.4 RESEARCH METHODOLOGY**

The primary data were collected directly from the consumers using a detailed questionnaire. The secondary data was collected from text books and internet the collected data were coded tabulated and analyzed with the help of statistical tools like percentages and various inferences have been drawn.

The researcher has adopted convenience sampling method and selected 50 sample consumers for the present study. In order to give due representation care was taken to include different type of customers such as employed, professional, student and housewives.

**2. ANALYSIS OF THE STUDY**

This chapter includes analysis and interpretation of data about the core aspects of the study. Tables and tools were used for analysis.

**TABLE 2.1: AGE –WISE DISTRIBUTION OF CONSUMERS**

Age	Number of Respondents	Percentage
Below 30	3	6
30-40	25	50
41-50	15	30
51 and above	7	14
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary Data

The above table stated that out of 50 respondents, 3 (6%) of them are under the age group of below 30 years and 25 (50%) of them are under the age group of 31-40. Another 15(30%) of them are under the age group of 41-50 and the remaining 7(14%) are under the age group of 51 and above.

**TABLE 2.2: DISTRIBUTION OF RESPONDENTS BY OCCUPATION**

Occupation	Number of Respondents	Percentage
Government Employees	22	44
Private Employees	12	24
Businessmen	8	16
Students	5	10
Housewives	3	6
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary Data

The above table indicates the occupational status of the respondents. Among the respondents 22(44%) of them are government Employees and 12(24%) of them are private employees. Another 16% the respondents are businessmen and 10% of the respondents are students. Remaining 6% of the respondents are Housewives.

**TABLE 2.3: BUYER'S OPINION ABOUT PACKED /BOTTLE WATER**

Opinion	Number of Respondents	Percentage
Hygienic	32	64
Not Hygienic	18	36
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary Data

The above table indicates that out of 50 respondents, a majority of the respondents(64%) the opinion that packed/bottle water is hygienic and 36% of the respondents have the opinion that packed/bottle water is not hygienic.

**TABLE 2.4: BUYER'S OPINION ABOUT THE COST OF PACKED /BOTTLE WATER**

Opinion	Number of Respondents	Percentage
Reasonable	37	74
Not reasonable	13	26
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary Data

The above table indicates that out of 50 respondents, a majority of them (74%) have the opinion that the cost of packed/bottled water is reasonable and another 26% of the respondents feel that the cost is not reasonable.

**TABLE 2.5: OVERALL SATISFACTION OF THE BUYER'S**

Status	Number of Respondents	Percentage
Satisfied	32	64
Not satisfied	18	36
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary Data

The above table indicates that out of 50 respondents, 64% of the respondents are satisfied with the packed/bottled water and the remaining 36% of the respondents are not satisfied with the packed bottled water.

**TABLE 2.6: PURPOSE OF USING BOTTLE WATER**

Purpose	Number of Respondents	Percentage
Drinking only	40	80
Drinking and cooking	10	20
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary Data

Above table shows out of 50 respondents 80% of the respondents are using the water for drinking only. The remaining 20% of the respondents are using the water for drinking and cooking.

**TABLE 2.7: REASONS FOR BUYING BOTTLED WATER**

Reasons	Number of Respondents	Percentage
Status affair	4	8
Health consciousness	40	80
To go along with others	6	12
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary Data

The table shows that out of 50 respondents, 8% of the respondents buy bottled water as a status affair. A majority of the respondents 80% buy it due to their health consciousness and the remaining 12% of them buy just to go along with others.

**TABLE 2.8: FACTORS INFLUENCING THE PREFERENCE OF PACKED/BOTTLED WATER**

Factors	Number of Respondents	Percentage
Quality	7	14
Easy availability	6	12
Low Price	12	24
Brand image	25	50
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary Data

The above table indicates that among the 50 respondents 7 (14%) of the respondents prefer packed/ bottle water on the basis of quality and another 6(12%) prefer packed/ bottle water on the basis of its easy availability. Another 12(24%) of the respondents prefer on the basis of low price and the remaining 25(50%) respondents prefer packed/ bottle water on the basis of brand image.

TABLE 2.9: PREFERENCE OF CUSTOMERS AMONG VARIOUS PACKED/BOTTLED WATER COMPANIES

Companies	Number of Respondents	Percentage
Bisleri	20	40
Kinley	12	24
Aquafina	18	36
Total	50	100

Source: Primary Data

The above table shows that the out of 50 respondents 20 (40%) of them prefer Bisleri brand and 12 (24%) of them prefer Kinley brand. Another 18 (36%) of them prefer Aquafina.

### 3. FINDINGS AND SUGGESTIONS

#### 3.1 INTRODUCTION

This study was conducted on consumer preference towards packed /bottle water in Tuticorin with the objectives to know the preference and satisfaction of the consumers with the packed/bottled water. Primary data were collected through detailed questionnaire. The collected information was edited and coded by using short tables, percentage. And the secondary data were collected from the available books and internet. After analyzing and processing, the collected information, the following findings suggestions and conclusion are drawn.

#### 3.2 FINDINGS

- Majority of the respondents (50%) of them under the age group of 30-40.
- Many of the respondents (50%) prefer packed/bottled water on the basis of brand image.
- Majority of the respondents (64%) the opinion of the packed/bottled in hygienic.
- Many of them (74%) have the opinion that cost of packed/bottled water.
- Majority of the respondents (64%) satisfied with packed/bottled water.
- Many of the respondents (80%) using the packed/bottled water for drinking only.
- Many of the respondents (80%) buy it due to their health consciousness.

#### 3.3 SUGGESTIONS

- It is observed while collecting data that most of the users are not happy about the body of the package. So the manufactures can improve the body of the package.
- The shops need to be located in main areas. So as to have easy access. Even though location plays a vital role in promoting sales, proper advertisement is also necessary.
- The price of the packed/bottled has to be moderate with enhanced quality to attract the middle class people.
- Due to water pollution there is a need for packed water even in households. So more concern is need on quality.

### 4. CONCLUSION

This study is based on the attitude of the consumer's preference towards packed/bottled water. Most of the consumers have expressed positive opinion. However some of the consumers have a negative opinion. The companies which produce products should produce the goods with superior technology and make the consumers satisfy and there by survive in the market for a very long period.

Water utilities want to meet consumers' needs and preferences. To target investments they need knowledge about consumer acceptance, (dis)satisfaction and willingness to pay. For example, when consumers' willingness to pay for changes is known, the available financial resources to implement these changes can be directed towards an economic optimum.

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## A STUDY ON THE CUSTOMER PERCEPTION TOWARDS E-BANKING IN RAIPUR CITY

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### ABSTRACT

Online banking (or Internet banking) allows customers to conduct financial transactions on a secure website operated by their retail or virtual bank, credit union or building society. In today's demanding world, everybody needs instant banking solutions for a better lifestyle. In the current scenario, almost every bank in India has the internet banking facility. Online banking or internet banking made things much easier for the people and saves lot of time. Customers are being facilitated by reducing their visits in banks and they can carry out their transactions via internet or ATM Machines instead of personally visiting the branches. The researches so far done reveal that mostly the customer of banks are unaware about online banking services and there is a lack of trust among customers on online banking services. This study examines the customer perception, preferences, problems and suggestions about online banking in Raipur. The study reveals that mostly customers prefer internet banking (IB) services over branch banking due to reliability, convenience, speed, safety and security, cost effectiveness, user-friendly, and error free system. The research is focused on what are the customer's perceptions about internet banking and what are the drivers that drive consumers. How consumers have accepted internet banking and how to improve the usage rate were the focus of research area in this study. Qualitative exploratory research using questionnaire was applied. 50 respondents were selected for study after initial screening. They were all bank customers.

### KEYWORDS

internet banking, customers' perception, quality, satisfaction, commercial banks.

### INTRODUCTION

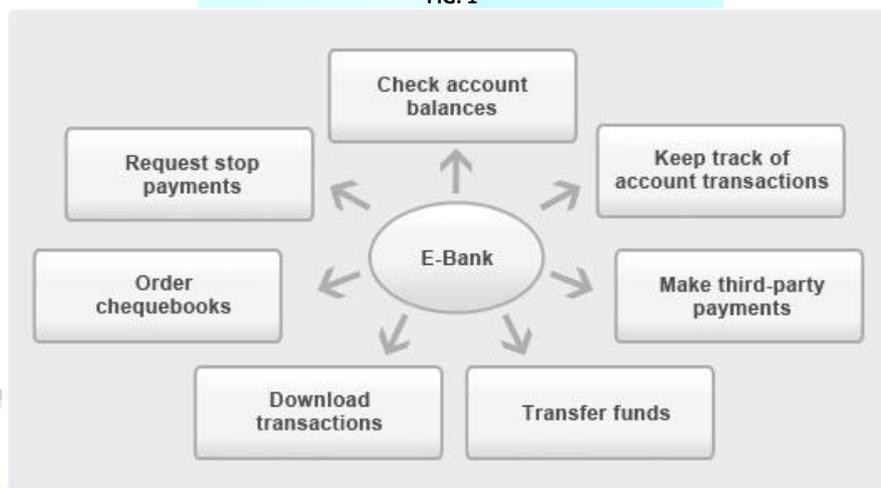
Internet banking (or E-banking) means any user with a personal computer and a browser can get connected to his bank's website to perform any of the virtual banking functions. In internet banking system the bank has a centralized database that is web-enabled. All the services that the bank has permitted on the internet are displayed in menu. Once the branch offices of bank are interconnected through terrestrial or satellite links, there would be no physical identity for any branch. It would be a borderless entity permitting anytime, anywhere and anyhow banking. E-banking provides enormous benefits to consumers in terms of ease and cost of transactions, either through Internet, telephone or other electronic delivery. The financial products and services have become available over the Internet, which has thus become an important distribution channel for a number of banks.

### WHAT IS E-BANKING?

In simple words, e-banking implies provision of banking products and services through electronic delivery channels. Electronic banking has been around for quite some time in the form of automatic teller machines (ATMs) and telephone transactions. In more recent times, it has been transformed by the internet—a new delivery channel that has facilitated banking transactions for both customers and banks.

Internet Banking lets you handle many banking transactions via your personal computer. For instance, you may use your computer to view your account balance, request transfers between accounts, and pay bills electronically.

FIG. 1



### TYPES OF E-BANKING

- Deposits, withdrawals, inter-account transfer and payment of linked accounts at an ATM;
- Buying and paying for goods and services using debit cards or smart cards without having to carry cash or a cheque book;
- Using a telephone to perform direct banking-make a balance enquiry, inter- account transfers and pay linked accounts;
- Using a computer to perform direct banking-make a balance enquiry, inter-account transfers and pay linked

### ADVANTAGES OF E-BANKING

- Account Information: Real time balance information and summary of day's transaction.
- Fund Transfer: Manage your Supply- Chain network, effectively by using our online hand transfer mechanism. We can affect fund transfer on a real time basis across the bank locations.
- Request: Make a banking request online.
- Downloading of account statements as an excel file or a text file
- Bill Payment through Electronic Banking
- Effecting Personal Investments through Electronic banking
- Customers can also submit the following requests online: Registration for account statements by e -mail daily / weekly / fortnightly / monthly basis

- Stop payment or cheques
- Cheque book replenishment
- Demand Draft / Pay-order
- Opening of fixed deposit account
- Opening of Letter of credit

### LIMITATION OF INTERNET BANKING

- Safety situations around ATMs.
- Abuse of bank cards by fraudsters at ATMs
- Danger of giving your card number when buying on-line

### REVIEW OF LITERATURE

Harris (2007) observed that Internet Banking is Becoming "Need to Have" service.

E-banking is one of the most recent technological innovations, which is becoming a need for every common man. It uses Internet as a medium for delivery banking services. Today, banking is not limited to branches, where a person goes to bank for withdrawal of cash or request a statement of accounts or to deposit a check. An inquiry or transaction can be handled online without any reference to the branch any time through Internet Banking. Benefits of internet banking include fast speed, convenient, cost effective, all time accessibility, and flexibility.

Vardhman (2007) said Online Banking - The Need of the Modern Professional- Internet Banking has been so popular in the countries it has been implemented in so far due to certain reasons. Online Banking makes the regular transactions for a client speedy and time efficient with little or no paperwork involved. There is no need for standing in long queue any more for making a deposit or getting a withdrawal. Banking has turned into a 24/7 service with the bank always available to their client.

Sayar et. All (2007) discussed that the developments in information technology and the subsequent evolution of internet banking have fundamentally changed the ways in which banks implement their business and consumers conduct their everyday banking activities. The results confirm the influence of internet trust on risk perception and consumer attitudes towards internet banking. . The results confirm the influence of internet trust on risk perception and consumer attitudes towards internet banking.. This is not a representative study.

Kamiya (2006) investigated how e- banking can ease your life Internet banking provides us facilities like Bill payment service, fund transfer, credit card customers, railway passing, Investing through internet banking, recharging your prepaid phone, shopping at your fingertips. Indian banks are trying to make your life easier. Not just bill payment, you can make investments, shop or buy tickets and plan a holiday at your fingertips.

Nachiket (2000) found that that Reserve Bank of India survey revealed that of 46 major banks operating in India, around 50% were either offering Internet banking services at various levels or planned to in the near future.

### STATEMENT OF PROBLEMS

Customers are lifeblood for any business and banking industry is highly service oriented business. When there is service concern, it always deals with the perceptual decision taking of the customer. Here, in this paper we tried to figure out the reason for the perception of the people residing in Raipur city for choosing the banking service on the basis of cost, convenience, facility and general factors like modernization of the bank, promptness for attending customer. This research deals with question like -What is customers' perception about Internet banking. What are the factors that result in the perception of the I-banking?

### OBJECTIVES OF THE STUDY

- Main objective of this study is to know about customer perception regarding usage of internet banking.
- To investigate the Satisfaction level of Customers with Internet banking services.
- To know the reasons of using Internet banking of customer and their satisfaction level.
- To know the main reasons of not using Internet banking
- To know the challenges in E-banking faced by banks concerning the development of internet banking services.
- To help managers to formulate strategies / policies about Internet banking according to customer needs and wants.

### SCOPE AND SIGNIFICANCE

A big boom has been witnessed in Banking Industry in recent times. A large number of players are there in the market and are trying to gain market share in this rapidly improving market. The study then goes on to evaluate and analyze the findings so as to present a clear picture of trends in the Banking sector specifically e-banking.

### SIGNIFICANCE OF THE PROJECT

This project gives useful information about benefits and challenges of e-banking. Since it present clear picture of customer perception, it facilitate banking sector to plan services according to customers need.

### RESEARCH METHODOLOGY

The present study is based on primary data. The information relating to the customer perception towards services provided by all the banks in Raipur is collected for the study through survey with the help of questionnaire .The total sample size of the study is 50. To meet up with the objectives of study 50 customers were selected as sample unit. So, the questionnaires were filled by 50 respondents which were structured with questions of demographic profile, services level and dimension in which derives satisfaction to the customers. To carry out the study in more accurate convenience random sampling method was selected. I have done personal interviews and I asked the person in front of me to fill the questionnaire and I was there with the respondents at all times in order to guide him/her and solved the queries at the time of filling in the responses.

**DESCRIPTIVE RESEARCH DESIGN:** It seeks to determine the answers to who, what, where, when and how questions. It is based on some previous understanding of the matter. Descriptive Research Design is used in this study because it will ensure the minimization of bias and maximization of reliability of data collected. Research has got a very specific objective and clear cut data requirements.

#### DATA COLLECTION METHOD

**PRIMARY DATA:** It is first hand data, which is collected by researcher itself. Primary data is collected by various approaches so as to get a precise, accurate, realistic and relevant data. The main tool in gathering primary data was questionnaire which was collected from 50 respondents.

#### RESEARCH HYPOTHESIS

**HYPOTHESIS 1:** Mostly customers prefer IB services over branch banking because it is reliable, convenient, faster, safe, cheap, user-friendly, and error free.

**HYPOTHESIS 2:** Mostly customer are Satisfied with IB services in India.

**HYPOTHESIS 3:** Security problems, lack of trust and knowledge, ATM machine problems etc. affect the adoption decision of customers of IB services.

**HYPOTHESIS 4:** Cash depositing facility through ATM machines, "SMS/E-mail Alert" Service, Transfer funds through ATM machines, Payment of utility bills through internet are the most required / demanding services by the customers.

**SAMPLING METHODOLOGY**

**SAMPLING TECHNIQUE**

Initially, a rough draft was prepared keeping in mind the objective of the research. A pilot study was done in order to know the accuracy of the Questionnaire. The final Questionnaire was arrived only after certain important changes were done. Thus my sampling came out to be judgemental and convenient.

**SAMPLING UNIT**

The respondents who were asked to fill out questionnaires are the sampling units. These comprise of employees of MNCs, Govt. Employees, and Self Employed etc.

**SAMPLE SIZE**

The sample size was restricted to only 50, which comprised of mainly peoples from different regions of Raipur due to time constraints.

**SAMPLING AREA**

The area of research is Raipur city.

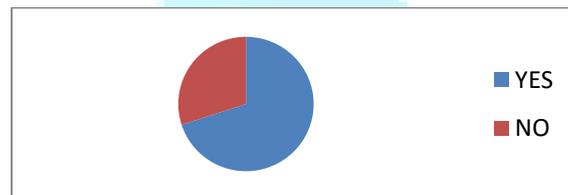
**LIMITATIONS**

1. The study is limited to the study of expectations of and perceptions of customers having an account banks.
  2. If the sample size could be taken a bit larger, we could have reached to more accurate results.
  3. The perception of customers is limited to the time period of the study.
- People were mostly unwilling to talk because of their heavy schedule or they get annoyed with the phone calls or even if they are asked about this face to face
  - Primary data has its own limitations.

**DATA ANALYSIS AND INTERPRETATION**

1. Are you aware of net banking services offered by the banks?

YES	70%
NO	30%

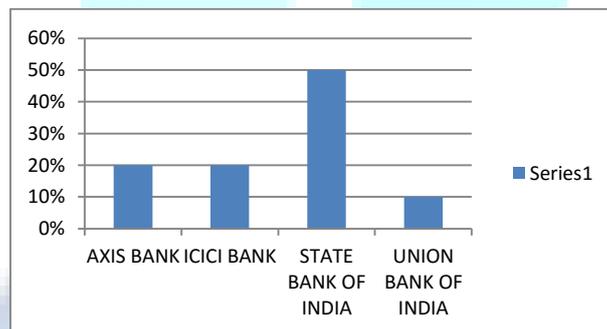


**Inferences**

Out of 50 respondents, 35 peoples are aware of internet banking.  
Reason: lack of interest or knowledge.

2. In which bank do you have your account?

AXIS BANK	20%
ICICI BANK	20%
STATE BANK OF INDIA	50%
UNION BANK OF INDIA	10%

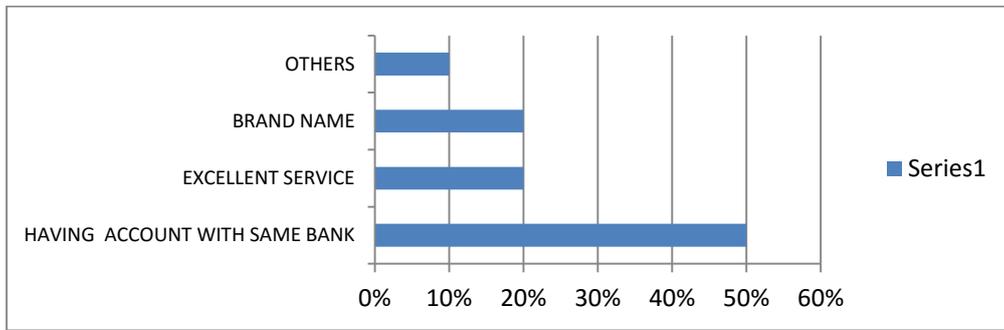


**Inferences**

State bank has maximum number of customer in comparison to other banks.  
Reason: As it has maximum number of ATM facility.

3. What was the single most important reason that you chose this particular bank as your Internet bank? (Please choose one)

HAVING ACCOUNT WITH SAME BANK	50%
EXCELLENT SERVICE	20%
BRAND NAME	20%
OTHERS	10%

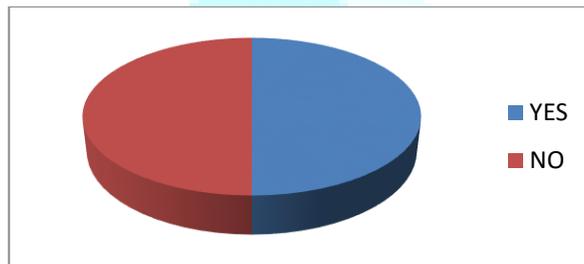


**Inferences**

Having account with a traditional bank account with the same bank is main reason for using internet banking, as most of the customers are afraid to opt other bank.

4. Do you feel safe in disclosing your details on internet?

YES	50%
NO	50%

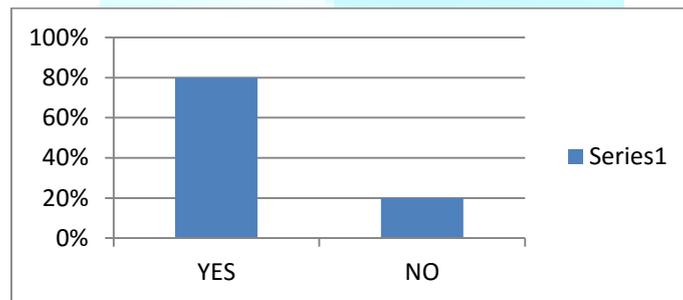


**Inferences**

Only 50% peoples prefer internet banking as customers is not having proper knowledge of technology

5. Are you satisfied with your bank services?

YES	80%
NO	20%

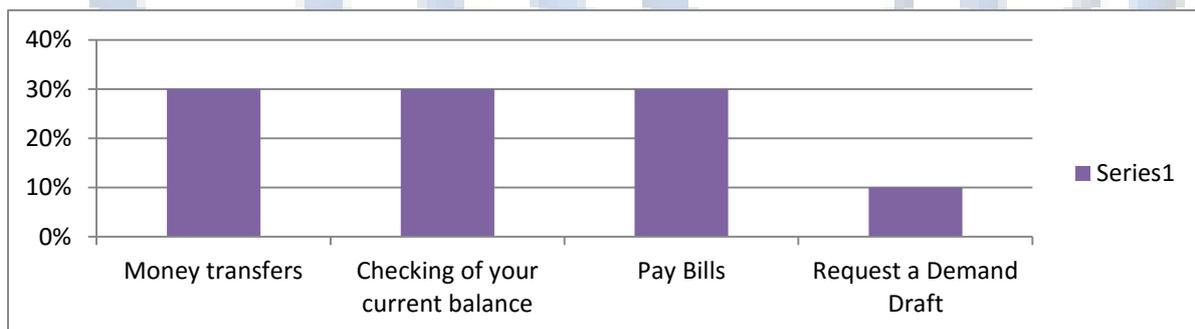


**Inferences**

Most of the customers are satisfied with their banking services as they are well adjusted according to their requirements.

6. What are your main transactions you would prefer to do by internet?

Money transfers	30%
Checking of your current balance	30%
Pay Bills	30%
Request a Demand Draft	10%

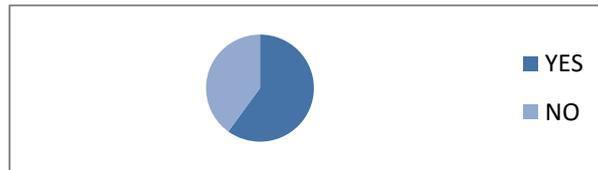


**Inferences**

Bill payment, money transfer and checking of current balance are daily needs of customer as it saves time.

7. Are you aware of the benefits of net banking which are available?

YES	60%
NO	40%

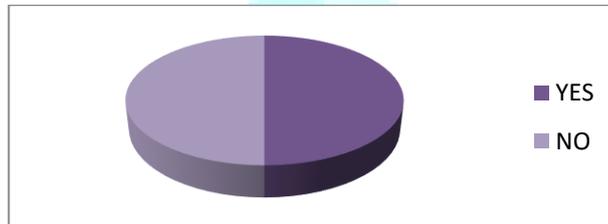


**Inferences**

60 % peoples are aware of benefits of internet banking through websites, browsers of banks and bank staff.

8. Are you aware of the methods which can be undertaken to make any kind of fraud?

YES	50%
NO	50%

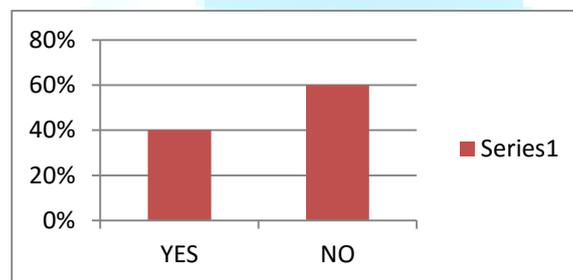


**Inferences**

50% are aware of frauds commit in Internet banking but rest of them are not aware beside they are using internet banking.

9. Are you aware of all the methods which can be taken up to secure your transaction?

YES	40%
NO	60%

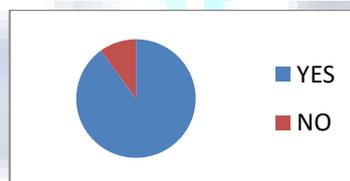


**Inferences**

Only 40% of customers are aware of methods which secure transactions as due to this reason risk of password hacking and frauds are always associated with banking activities.

10. Does your bank educate you about the net banking services being offered?

YES	90%
NO	10%

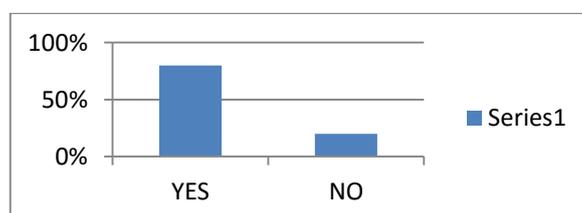


**Inferences**

Banks always educate customer about their services because they want more and more customer to get advantages of their prompt services

11. Would you prefer using net banking instead of visiting your bank every now and then?

YES	80%
NO	20%

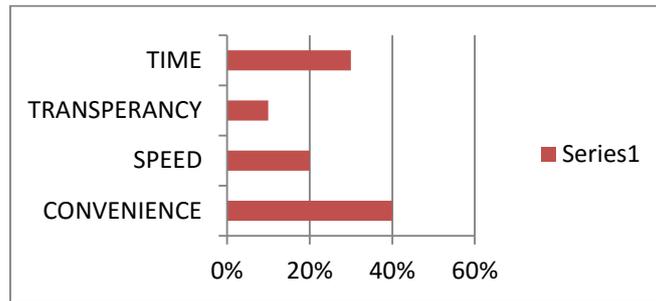


**Inferences**

80% customer prefer to use internet banking as it gives convenience and save valuable time of customer specially those who are working and not enough getting time to finish their work.

12. What benefits do you see in internet banking?

CONVENIENCE	40%
SPEED	20%
TRANSPERANCY	10%
TIME	30%



**Inferences**

60% respondents said that E-banking is 24 hours available as this feature makes it convenient, time saving, and transparent.

**CONCLUSION**

This research gives complete overview of Internet banking. One of the benefits that banks experience when using e-banking is increased customer satisfaction. This due to that customers may access their accounts whenever, from anywhere, and they get involved more, this creating relationships with banks. Banks should provide their customers with convenience, meaning offering service through several distribution channels (ATM, Internet, physical branches) and have more functions available online.

From all of this, we have learnt that information technology has empowered customers and businesses with information needed to make better investment decisions. At the same time, technology is allowing banks to offer new products, operate more efficiently, raise productivity, expand geographically and compete globally. A more efficient, productive banking industry is providing services of greater quality and value.

Here it can be concluded that people have around 60 % people have positive perception & are satisfactory with E-Banking except one parameter (E-Banking is easy to use). Still people of these areas are not using all the E-banking services frequently because they less knowledge about computer and internet; so they feel hesitation in using E-banking services.

The rise of E-banking is redefining business relationships and the most successful banks will be those that can truly strengthen their relationship with their customers.

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**MORALE AND MOTIVATION**

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**ABSTRACT**

*Employees who survive job are expected to put in any extra effort when needed, but it may not be that simple. People may have family or other outside obligations that limit the amount of extra time they can spend at work. One of the things you can do to ease anxiety over job security is to make sure people are busy, so they don't suffer much idle time to spend worrying about a light workload and wondering if their job is next. This may seem easy to do in the face of vacant positions and understaffing, but you may find it hard to keep things moving smoothly when you have to adjust staff assignments and schedules as a result of downsizing. Tasks may also stretch out to fill idle time as people try to appear busy even as real productivity suffers. In addition to the basics, look for other opportunities to increase morale and motivation, it is observed that things like achievement, recognition, responsibility, and advancement provide positive benefits. Morale and motivation can be developed by talking about the business value of the work. Recognize good performance to your managers. Get the team together often and build a sense of team loyalty. Instead of having people complain privately, get the team together to share experiences, conduct cross training, share lunches, etc. If people really feel a part of a team, they are bound to pull together and not let the rest of the team down, giving people more responsibility. People respond better when they have responsibility. The project manager can also challenge people with new or increased levels of responsibility on a project, having fun. There is a lot that can be done to have fun on a project team. Creation of a pleasant work environment is also very important. Motivating employees just takes a little thought and good manners, things anyone in a management position is able to do.*

**KEYWORDS**

morale, motivation.

**INTRODUCTION**

Good organizational morale is a condition in which individuals and groups voluntarily make a reasonable subordination of their personnel objectives of their organization. Motivation is an act of stimulating someone to get a desired course of action. Every person has different reasons for working. The something obtained from work impacts morale, employee motivation, and the quality of life. To create positive employee motivation, treat employees as if they matter - because employees matter. These ideas will help to fulfill what people want from work and create employee motivation.

Morale can be defined as the total satisfaction derived by an individual from his job, his work-group, his superior, the organization he works for and the environment. It generally relates to the feeling of individual's comfort, happiness and satisfaction. According to Davis, "Morale is a mental condition of groups and individuals which determines their attitude."

In short, morale is a fusion of employees' attitudes, behaviours, manifestation of views and opinions - all taken together in their work scenarios, exhibiting the employees' feelings towards work, working terms and relation with their employers. Morale includes employees' attitudes on and specific reaction to their job.

**IMPORTANCE OF STUDY**

Motivation is defined as an urge in an individual to perform a goal directed behavior. Therefore, motivation cannot be inflicted from outside but it is an intrinsic desire in a man to achieve the target goal through performance or activity. Motives are expression of person's need. Hence, they are personal and internal. Incentives on the other hand are external to the person. They are made part of work environment by management in order to encourage workers to accomplish task. The motivational model indicates that a sense of felt deprivation generates needs and such needs create tension in an individual. The individual perceive and makes cost benefit analysis on the ways and means of releasing such tension. Once such perception is cleared, individual pounces upon the activities and achieves some results. If it is success he feels rewarded and falls in the cycle of motivation again. If it is failure he feels punished and once again after due modification of ways and means pounces back on the cycle or feels frustrated. Therefore, motivation leads to a goal directed behavior.

**OBJECTIVES**

When people join an organization, they bring with them certain needs that affect on-the-job performance. Some of these needs are physiological; others are related to psychological and social values. The later are much more difficult to determine and satisfy, and they vary greatly from one to another. Maslow has developed a hierarchy of needs as follows: physiological, security, social, esteem, and self-actualization needs. They interact with the environment to shape on-the-job wants that are the basis of motivation. In addition, motivation is affected by people's perceptions, including their feelings of equity or fairness in a situation.

Though motivation and morale are closely related concepts, but they are different in some ways:

While motivation is an internal-psychological drive of an individual which urges him to behave in a specific manner, morale is more of a group scenario, Higher motivation often leads to higher morale of employees, but high morale does not essentially result in greatly motivated employees as to have a positive attitude towards all factors of work situation may not essentially force the employees to work more efficiently. While motivation is an individual concept, morale is a group concept. Thus, motivation takes into consideration the individual differences among the employees, and morale of the employees can be increased by taking those factors into consideration which influence group scenario or total work settings.

Motivation acquires primary concern in every organization, while morale is a secondary phenomenon because high motivation essentially leads to higher productivity while high morale may not necessarily lead to higher productivity. Things tied to morale are usually things that are just part of the work environment, and things tied to motivation are tied to the performance of the individual.

**FINDINGS**

Motivating employees can be one of the biggest challenges as an employer, but learning how to inspire the workforce is the key to a successful organization. Constant pressure to increase productivity, profitability and revenue growth can often overshadow the importance of how an unengaged workforce can negatively affect corporate performance. Nationwide studies have shown that up to 80% of employees are not motivated by their work. Many organizations continuously face the problems associated with decreased employee motivation including complacency, declining morale, and widespread discouragement in the workplace. If allowed to continue, these problems can reduce productivity, earnings, and competitiveness in your business. Motivating employees is crucial to the success of our rapidly changing workplaces. Motivated employees help organizations survive by being more productive. Effective managers need to understand what motivates individual employees within the context of their job. Of all the functions a manager performs, motivating employees is arguably the most complex due to the fact that what motivates employees changes constantly.

Many managers create low morale. In reality it isn't their fault and they don't chose to do so. Nevertheless, they do create low morale in employees. Everyone knows that the sports team with the highest morale wins. In fact, every manager wants high morale in his/her group. So why do most managers create low morale in their employees.

In truth, given the societal, educational and workplace related influences, it would be amazing if managers did not create low morale and severely damage employee motivation. From birth, most of us are told what to do. We receive a rather overwhelming number of orders, directions and policies from those who believe we should follow their dictates; parents, teachers, churches, government and finally boss in the workplace.

In addition, employees also feel demeaned and degraded if no one listens carefully to their ideas and whatever else they have to say. But the command and control model implies that employees should listen to the leaders and that leaders have no need to listen to employees. So managers spend most of their time trying to figure out their next order and rarely if ever take the time to listen to their people.

But there are more negative effects on morale and workforce motivation associated with the command and control model, specifically from not listening to employees and not dialoguing with them over workplace problems. Without these, managers are denied a firsthand view of problems from those living with them up close and personal every day.

Without these facts, orders and directives from managers rarely address the real problems and more often exacerbate them. This leads employees to distrust and disrespect management and causes further reductions of morale and workforce motivation. Failure to listen and dialogue over perceived problems denies employees information which only the manager has and which is necessary to being able to understand the true cause of problems or the seriousness of them. Lacking this information, employee expectations and criticisms are quite often unrealistic, thus causing the manager to disrespect employees. Thus, low workforce morale, poorly motivated employees and greatly reduced employee performance quite naturally result from using an authoritarian based command and control model.

There are certain solutions for improving morale and motivation in employees. Team building is important to any organization where people must work cooperatively with others in the company to accomplish projects and daily tasks. Though this term is often associated with organized activities such as company retreats and group exercises, it also encompasses more mundane daily efforts to help team members get to know one another and to develop a cooperative working spirit. If the company is organized along departmental lines and belongs to a well-defined department with specific tasks and objectives, most team-building activity probably occurs at this level. Depending on the size of the department, there are various ways to foster teamwork within the entire department. In any case, bringing small teams together as a group to discuss common problems, solutions, and preferred working methods, and to establish an esprit de corps, is a good thing. Occasional lunches out to a local restaurant, or catered within the office, can help create an informal atmosphere that mixes business and relaxation. Other outings, such as visiting project sites and attending product demonstrations, expositions, and educational seminars, also bring teams together. After-hours activities such as participation in a company or departmental sports activity or other group activity can be effective, rewarding, and fun. Any sort of activity that serves to identify individuals as members of a cooperative group effort-literally as a member of the team in a context that is not directly related to work activities-forms bonds that directly influence cooperative work efforts.

If the firm anticipates downsizing, or has already gone through a round or two of layoffs, few workplace problems cause people more concern and anxiety than the possible loss of employment, especially when alternative job opportunities seem limited or nonexistent. People who remain employed after a round of layoffs may need special care and understanding. Not only are they anxious about the security of their own jobs, but they likely face additional job pressure as they take on more tasks to make up for the loss of other personnel. They still have deadlines to meet, so may need to ask people to work harder and put in extra hours to get the work out.

## CONCLUSION

Employees who survive job are expected to put in any extra effort when needed, but it may not be that simple. People may have family or other outside obligations that limit the amount of extra time they can spend at work. One of the things you can do to ease anxiety over job security is to make sure people are busy, so they don't suffer much idle time to spend worrying about a light workload and wondering if their job is next. This may seem easy to do in the face of vacant positions and understaffing, but you may find it hard to keep things moving smoothly when you have to adjust staff assignments and schedules as a result of downsizing. Tasks may also stretch out to fill idle time as people try to appear busy even as real productivity suffers.

In addition to the basics, look for other opportunities to increase morale and motivation, it is observed that things like achievement, recognition, responsibility, and advancement provide positive benefits. Morale and motivation can be developed by talking about the business value of the work. Recognize good performance to your managers. Get the team together often and build a sense of team loyalty. Instead of having people complain privately, get the team together to share experiences, conduct cross training, share lunches, etc. If people really feel a part of a team, they are bound to pull together and not let the rest of the team down, giving people more responsibility. People respond better when they have responsibility. The project manager can also challenge people with new or increased levels of responsibility on a project, having fun. There is a lot that can be done to have fun on a project team. Creation of a pleasant work environment is also very important. Motivating employees just takes a little thought and good manners, things anyone in a management position is able to do.

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**VIRTUAL CURRENCY – EMERGENCE OF BITCOIN****K. SHREE JYOTHI****LECTURER****DEPARTMENT OF COMMERCE  
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BEGUMPET****ABSTRACT**

Ecommerce relies on financial institutions to serve as third party to process electronic payments. The traditional model is characterized by the disputable reversible transactions. In developing countries this feature has become a stumbling block for the progress of ecommerce. This has led to the invention of virtual money. In 2008, Satoshi Nakamoto introduced a new virtual currency model called Bitcoin. The goal of this payment system is to eliminate the financial intermediaries with trust in "proof of work"(PoW). This relatively new crypto currency does have many legitimate and quickly growing uses, and best known for its popularity with criminal and shadowy internet figures. Recently, FBI became the largest owner of this Bitcoin, when it closed down the internet market place Silk Road transactions. This paper explores the concept and usage of this decentralized cryptographic currency. Growing technological advancement has triggered the popularity of virtual money and that of bit coin, though the idea of cryptographic electronic currencies came up more than two decades ago. It also looks into the SWOT analysis of the "V coin" and the future of the coin in the long run. The paper also focuses on the strength of the bit coin in comparison to the other virtual currencies that have disappeared over the time.

**KEYWORDS**

Bitcoin, Virtual currency, Ecommerce, P2P, Cryptography, PoW, payment systems.

**INTRODUCTION**

Man is the most creative species on the earth. Man's interest in exchange of goods and services for value has bought in the concept of money. Present day societies cannot function without this money. Currencies of all countries have faced the storms this decade and a search for a currency that does not experience huge fluctuations, inflation has seriously begun now, and man has matured enough to think of something that is not physical like money. The concept of money has evolved over the years. The technological innovations now have somewhat necessitated the evolution of a new concept that is accepted like the money in the digitalized "virtual world".

"Virtual Money" has been in usage since 15 years. It is now the legislators and regulators are sitting up to watch this phenomena take the financial world by surprise. In the year 2009 a crypto currency or a digitalized decentralized currency Bitcoin was introduced by Satoshi Nakamoto, a pseudonym programmer. The coin went on to become the best traded virtual currency in these five years. There are at present around 80 virtual currencies with fancy names like Feathercoin, Bbqcoin, Fireflycoin, and Zeuscoin. However unlike other cryptocurrencies, Bitcoin is supported by vibrant economy of developers, users, and exchanges, businesses that allegedly reached a \$2.5B market cap at the end of April 2013. This "V coin" has acquired importance because the currency supports new forms of e-commerce, online business formats and challenges established the financial system.

This paper explores the trend of these virtual currencies with special reference to Bitcoin. It is important to take into account that these currencies both resemble money and necessarily come with their own dedicated retail payment systems; these two aspects are covered by the term "virtual currency scheme". Bitcoin's emergence as the most popular virtual currency is of special interest to central banks as these have threatened the existence of financial intermediaries like banks. They have somehow grown without the regulatory noose of the central Banks around the world. This paper tries to trace the rise of Bitcoin, its resilience to financial downturns or crisis. The study is mainly an exploratory one and hence tries to arrive at a possible hypothesis that can be studied further. There has been a spate of debates and discussions across the western world about this Bitcoin. In India the Bitcoin seems to be in the nascent stage only and the RBI has not acknowledged its existence as yet.

The study is limited to the exploring of present literature on virtual currencies. This is an emerging idea and there is not much authentic literature on the subject. The study depended on internet publications and some of the publications made by banks in US, European Central bank and National Australian bank. This is the major limitation of the study. The concept of crypto currencies depends mainly on computer software systems, which are difficult for layman's understanding posing a limitation. The mining of these coins requires a reasonable level of computer knowledge. With India being one of the major countries bestowed with best of computer software personnel, we may assume a potential market in India for this Bitcoin, thus the study explores the SWOT of this currency to become the future of all financial transactions.

**VIRTUAL CURRENCY**

Dictionary definition of "Currency" is a system of money in general use in a particular country: the fact or quality of being generally accepted or in use. Virtual is something that is not visible, physical. These currencies are virtual because they are not physical and are not backed by any physical commodity of value like gold or similar goods. The history of currency shows that it has evolved over the time and that it need not necessarily be physical. However, there are certain characteristics that are mandatory for it to be currency.

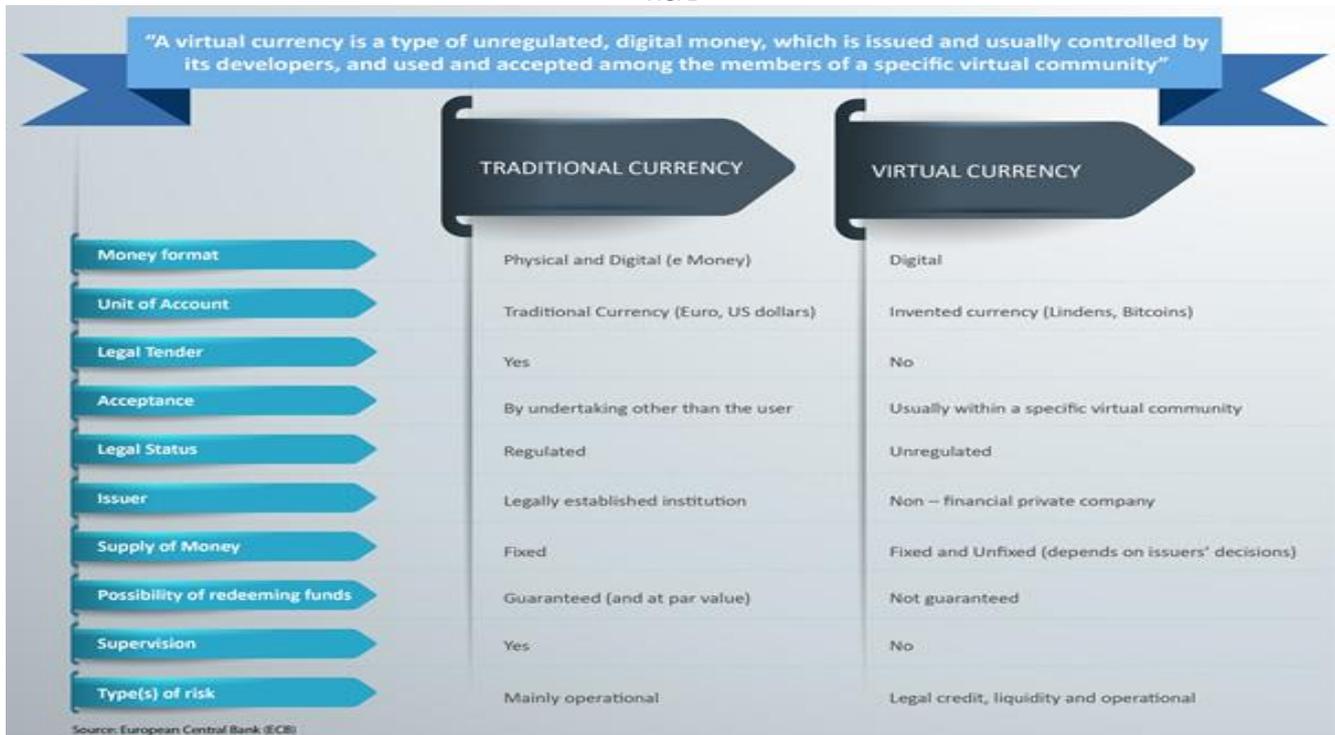
- Medium of exchange
- Unit of account

- Store of value
- Restricted supply

The test that any medium of exchange becoming a currency has to stand up to is the trust or acceptability it enjoys, the value it creates for itself, user, and creator. Thus there is a significant level of perception of the users involved in the concept of currency.

Apart from the difference that the traditional currency is physical and the virtual currency is digital, the difference between a traditional currency and virtual currency is that the traditional currency has central agencies as its creators while virtual currencies are not created by any central agency. The second difference is that the traditional currency is regulated by the central agency while the virtual currency is not under any regulatory authority.

FIG. 1



Virtual money is anything other than the real money used for the exchange of goods. Usage of cards, gift vouchers, passes etc also has the same unregulated anonymity of cash transactions. Virtual money saw its beginning some fifteen years ago. The beginning has been in the games where the coins like the Linden dollars or any other points earned on your credit card, or points earned on your Face book account, which can be later, exchanged for any goods offered by the particular company, community on the computer. The European Central Bank in its report on virtual currency schemes in October 2012 classified the present currencies under three categories. These are the closed virtual currency scheme, unidirectional flow of virtual currency scheme and virtual currencies with bi-directional flow.

The increase in the various online businesses combined with the increase in the technological progress facilitated or gave impetus to this phenomenal growth in the virtual economies and currencies. This proposition has attracted the watchful eyes of regulatory central banking authorities world over.

The challenge that these virtual currencies face is the supply or restricting the creation and avoiding the duplication of its use. This is solved to some extent through complex software programming that ensures the limited supply as well as authentication of the transaction and not allowing duplication. Bit coin's supremacy lies in its features which stand to these two challenges.

**RELATED WORK**

**Satoshi Nakamoto (2009)** proposed a system for electronic transactions without relying on trust. His model started with usual framework of coins made from digital signatures, which provides strong control of ownership, but is incomplete without a way to prevent double spending.

In three frequently cited articles, **Kocherlakota and Wallace (1998)** and **Kocherlakota (1998; 2002b)** consider the similarities and substitutability of money and memory. **William J. Luther, Josiah Olson, Kenyon College,** stated that the Theories of memory have practical applications. Bitcoin is an imperfect form of memory and traditional monies are costly to store and/or verify, it is possible for the two types of exchange medias to coexist. **Philipp Güring, Ian Grigg(2011)** concluded that the requirement of diversification is broken by Bitcoin's very mechanism to make diversification work fairly. **Meni Rosenfeld** November 17, 2011, introduced Bitcoin mining and explained why the high variance in the rewards for this activity creates the need for mining pools. **Meni Rosenfeld** December 11, 2012, derived the probability for a successful double-spend, and tabulated it in various ways. **Ilja Gerhardt, Timo Hankey (2012),** introduced a payment protocol for customer merchant relations. A public key identifies merchants, which is their pseudonym. The protocol is suitable for bitcoin as the underlying payment system. **Denis Jaromil Roio,** 6 April 2013, claimed Bitcoin is breaking the Taboo on Money. He also said that it is a system that permeates most if not all-societal interactions, at least in the Western world, so it is assumed it to be neutral and, in any case, its existence cannot be questioned.

**WORKING OF BITCOIN**

Bitcoin is a giant digital ledger of individual coins (bitcoins – small letter b) where each entry is eventually tamper proof. Individual wallets carry a balance by referencing entries in the ledger, which point to them being the destination of the last transaction for a particular coin. Each wallet is a digital address, which can be referenced in such as transaction.

A physical entry such as an individual or a business or any commercial entity can have multiple wallets. A wallet is not a summary of holdings. It should be viewed as the entities own ledger balance of currently valid references to coins, similar to a commercial commodities account. However, unlike any such account, which cannot be easily "stolen", a wallet can be stolen by physically copying its underlying secret key (it's private key). Hence, the model of an electronic wallet.

One can use bitcoins from this point on as an international currency similar to the US Dollar. The stakeholders in the bitcoin network are the users who hold wallets, the bitcoin network, which maintains a global record of each bitcoin and merchants who accept bitcoin as a payment currency similar to other local currencies. Some of the types of merchants are normal businesses like retailers. There are even exchange style retailers who buy and sell other currencies in exchange for bitcoin either way.

Bitcoin is based on the economics of value, as bitcoins inherently carry no value. It is the value advertised by a merchant and accepted by a buyer, which determines a bitcoin's underlying value. In essence then, Bitcoin should be viewed as one of the ways in which a free market is evolving. The advantages it offers over the currently prevalent one of debt-backed currencies are

- 1) Elimination of "trust" as a basis for trade. Bitcoin is designed to always validate transactions coin by coin and works on the premise of not trusting anyone. This leads to elimination of currency fraud such as currency counterfeiting as a risk. Risks of fraud due to inadequate or fraudulent service still remain and should be covered by consumer protection legislation from the seller's country.
- 2) Elimination of unequal players in the market such as central banks who vary the value of a currency by regulating its supply/issuing debt.
- 3) A ceiling on the unregulated expansion of money supply and subsequent non-market backed inflation. The total number of possible bitcoins possible mathematically is limited to 21 Million as a hard limit.
- 4) Means for users to participate in a global market with an unregulated currency. This prevents any third party from interfering within any transaction

**MECHANICAL ASPECTS OF BITCOIN**

There are about 10 million bitcoins in existence today. When the Bitcoin network started, the value was obviously 0. So there is a process by which bitcoins are introduced in the economic system. One should view this analogously to the old system of precious metals as currency where a gold miner was effectively creating currency. The difficulty of finding and refining gold as an acceptable medium of commercial exchange established a value to this mining process. An intentionally named process of mining creates Bitcoins. Bitcoins are special sequences of bits within blocks, which have to satisfy many conditions. They have to be generated in blocks in pre-determined intervals only. This is again intentional as some of these conditions are crucial to establishing integrity within the Bitcoin (or BTC) network.

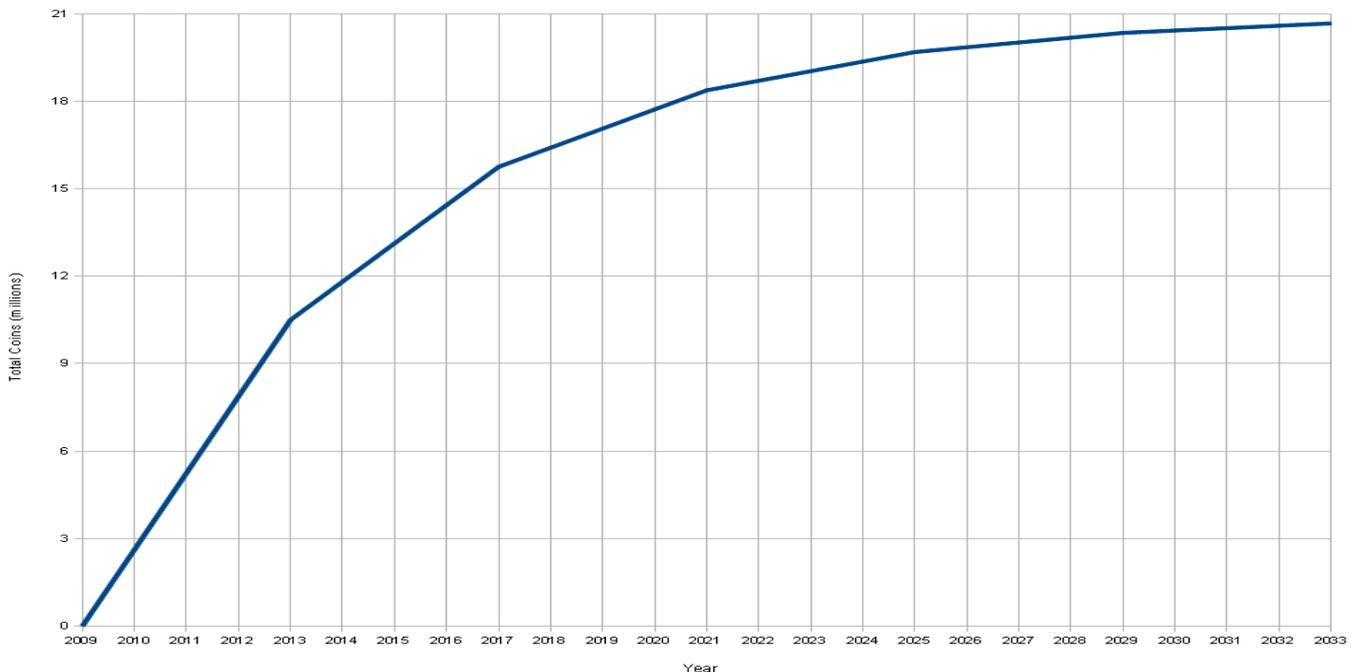
Every block introduces 50 new coins in the system. This quantity (50) halves every 210,000 blocks. So, getting the limit of coins it is possible to generate is quite easy: it's the sum of a geometric series.

$$\sum_{n=0}^{\infty} \frac{210000 \times 50}{2^n} = 210000 \times 50 \times \frac{1}{1 - \frac{1}{2}} = 21000000$$

(This is an upper bound; the actual quantity will probably be a bit lower due to rounding issues (BTC has a finite number of decimals, 8). Bitcoins will cease to be generated after a point in time by design.

**GRAPH 1**

Total Bitcoins over time



The Bitcoin network consists of a ledger of each and every known bitcoin, which double up as the input needed to mine new bitcoins. Nodes, which maintain these ledgers today, spend time and energy in finding a sequence of bits (32 characters), which precisely satisfy the many conditions for a valid solution to the mathematical problem, which will ultimately generate a valid bitcoin.

**BITCOIN MINING AND TRANSACTION INTEGRITY TODAY**

In the Bitcoin network, all outstanding transactions involving a transfer of ownership of bitcoins (note that we do not say transfer of bitcoins) are gathered together in a block of unconfirmed transactions worldwide. These are unconfirmed, as they are not yet entered into the digitally signed block based ledgers of the computer network worldwide. Today's mining algorithm is based on

- 1) Gather a list of potential transactions known as a "block". This list of transactions comes from the outstanding transactions in the worldwide list. It is not necessary that all transactions be found – simply because a block of transactions may be composed out of a large enough set of local transaction, local to a set of computers maintaining their ledgers and exchanging information about them. Since this set of computers is worldwide, this list or block of transactions is not necessarily identical. If a transaction does not make it into a successful block, it will make it into the next one, as all transactions will be public and known worldwide soon. The rate of spread is effectively the speed of the Internet. Two computers at opposite ends of the network may create blocks with many common transactions and some dissimilar ones. Once of these blocks will be successfully added to the global network. The remaining transactions in the unsuccessful block will be known worldwide by then so they become candidates for subsequent blocks. Eventually they will make it into a block. Since the time taken cannot be bound as can be seen, confirming a transaction on the Bitcoin network takes time.
- 2) Calculate a hash for a block of potential transactions along with a random number.
- 3) If the hash is more than the currently set difficulty level, then you have mined that block. If not, start over from step 1. Any additions to the list of transactions from step 1 along with change in the random number from step 2 mean that there's a chance that the criterion will be met in the next go around.

This description is simplified and omits a few details to communicate the basic idea.

**WHAT'S A HASH?**

A **cryptographic hash** (sometimes called 'digest') is a kind of 'signature' for a text or a data file. SHA-256 generates an almost-unique 256-bit (32-byte) signature for a text. See this website (<http://www.moveable-type.co.uk/scripts/sha256.html>) to try this out yourself.

Enter any message to check its SHA-256 hash

- Message
- Hash
- Note SHA-256 hash of 'abc' should be: *ba7816bf8f01cfea414140de5dae2223b00361a396177a9cb410ff61f20015ad*

A hash is a function that converts data into a number within a certain range. The hash has the property that knowing its output is essentially unpredictable (within the given range). The specific hash function used for bitcoin mining is SHA256 applied twice.

**CONFIRMATION TIME**

By design, each block takes about 10 minutes to solve; so waiting for 6 blocks would take about an hour. The particular choice of 10 minutes is an arbitrary time interval to ensure even slow networks get to exchange transaction information. As more computers join the network, and specialized hardware is designed specifically for mining, the block solution time would get very small. To compensate, every two weeks, all the Bitcoin software recalibrates the difficulty of the math problem to target 10 minutes. For comparison, a similar digital currency called Litecoin has been able to operate with a 2.5 minute block time.\*

\*A paper by M. Rosenfeld, Analysis of hashrate-based double-spending, concludes that security is a function of the number of blocks, and not the time used to solve each block, but this assumes an attacker's computing power is not dependent on time, i.e., he could overpower the network for days just as easily as a few minutes.

\*Also see comments by Satoshi regarding block time and system efficiency: <https://bitcointalk.org/index.php?topic=130222.60>

**HOW DOES THE DIFFICULTY LEVEL WORK?**

This unpredictable nature of the hash function (the solution space is spread across the possible combination of 256 bits such that the leading set of bits are 0) means that putting in random data (the transaction + the random number) will essentially produce a random number within a certain range. Further restricting the range of the desired output affects how likely one is to find it in a single round. This creates a way to probabilistically determine how often a solution will be found based on the number of times the algorithm can be run on the network. Specifically, when you hear the term Gigahashes or Terrahashes, this refers to the number of times step 3 can be run. As the number of hashes per second across the entire network grows, the network automatically raises the difficulty such that a solution will be found within about 10 minutes.

Example block hashes

Hash 00000000000000038e96358b0c7aaaf69d63bac03820d5b47d59c9d00019c722  
 Previous Block 00000000000000202b99385096abf80d615ebe4f31153b30dd0fcf34e1e10dc  
 Next Block(s) 0000000000000029e7ab1e48711605ee6c0fdddc7c87e0631c01548415d0b

To see this network in action, one can navigate to <http://blockchain.info> and pick any block chain to see transactions in flight.

**WHAT HAPPENS WHEN A BLOCK IS MINED?**

When a block is mined, the miner sends the block to all other miners on the network as evidence that it has found it. This block contains a list of transactions, the found hash, the specific random number, and a reference to the previous hash. As each miner receives the newly mined block, it removes all transactions that it is currently mining that exist within the block (because they've already been confirmed in the block chain) and broadcasts the block to other miners that do the same thing. The propagation happens pretty quickly. Note: the original miner of the block gets a "miners' fee", which is a reward the any unspent coins from transactions in addition to a "coinbase" reward, which stated out at 50 bitcoins and halves after ever 20... blocks. The coinbase reward will eventually get so small that it will be miniscule compared to miner's fees.

**SWOT ANALYSIS**

TABLE 1

	Strengths	Weaknesses
I N T E R N A L	<ol style="list-style-type: none"> <li>1. Easy access</li> <li>2. Great marketability</li> <li>3. Good security</li> <li>4. Quick multiplicability</li> <li>5. Demand</li> <li>6. Avoid duplication of use</li> <li>7. Durability</li> <li>8. Portability</li> <li>9. Fungibility</li> <li>10. Divisibility</li> <li>11. Valuable</li> <li>12. Self regulating Currency</li> <li>13. Avoids physical and logistical problems</li> <li>14. Anonymity</li> <li>15. Lack of intermediary</li> <li>16. Immediacy of settlement</li> <li>17. Wide acceptance</li> <li>18. Untraceability</li> </ol>	<ol style="list-style-type: none"> <li>1) Large amount of computer power required</li> <li>2) Scarcely available</li> <li>3) Time consuming</li> <li>4) Requires expensive computing services</li> <li>5) Its use is limited</li> <li>6) Liquidity problems</li> <li>7) Not redeemable like other currency</li> </ol>
E X T E R N A L	<b>Opportunities</b> <ol style="list-style-type: none"> <li>1. Increase in various online businesses</li> <li>2. Technological progress</li> <li>3. Bitcoin exchange markets</li> <li>4. Overseas remittances</li> <li>5. Financial inclusion</li> </ol>	<b>Threats</b> <ol style="list-style-type: none"> <li>1. Restriction in supply of virtual currency</li> <li>2. Regulations of various nations</li> <li>3. Illegal activities</li> <li>4. Tax considerations imposed</li> <li>5. Highly Speculative in nature</li> <li>6. Possess financial risk</li> <li>7. Absence of distinct legal framework</li> <li>8. Transactions are irreversible</li> <li>9. Hacking of private key leading to loss of money (Silk Road)</li> </ol>

**CONCLUSION**

Bitcoin is a great innovation, which is beneficial for ebusiness. Bitcoins have value because they are useful as form of money. Bitcoin's clever use of public-key encryption and peer-to-peer networking solves the double-spending problem that had previously made decentralized digital currencies impossible. Bitcoin when analysed on the basis of SWOT turned out to be a strong virtual currency with some dangerous limitations like illegal activities and frauds. Bitcoin is more

amenable to government regulation. Bitcoin, which is designed to allow individuals to make transactions directly without financial intermediaries, has attracted significant attention recently because of the challenges of regulating the system. The rules can be changed. They have been changed. And a semi-formal Bitcoin governance process is emerging. To the extent that Bitcoin's governance structure is subject to pressure from a regulator, or that a significant fraction of miners or users are subject to regulatory pressure, the regulator will be able to put pressure on the Bitcoin economy to change its rules. Even if a regulator forces the developers to incorporate changes into the Bitcoin rules and reference software, the rest of the Bitcoin community will be able to fork the rules and carry on under the rule set of its choice. Bitcoin is not immune to regulation, but it is not like traditional currencies either. Bitcoin is the mainstream open-source currency.

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**DIGITAL MARKETING MIX OF FLIPKART: AN OVERVIEW****SHEENA DAS****RESEARCH SCHOLAR****PG & RESEARCH DEPARTMENT OF COMMERCE****SREE NARAYANA GURU COLLEGE****K.G.CHAVADI POST, COIMBATORE****SENTHIL KUMAR.R****ASST. PROFESSOR****PG & RESEARCH DEPARTMENT OF COMMERCE****SREE NARAYANA GURU COLLEGE****K.G.CHAVADI POST, COIMBATORE****ABSTRACT**

Over almost half a century the frame work of four P's of marketing mix has been used as marketing tools to influence the buyers. Due globalization and technological advancements marketing mix has been to digital marketing mix. Flip kart is India's leading and largest online retailer. Flip kart has done many things innovatively to increase the sales and achieving a sustainable competitive advantage. This paper is purely based on secondary data and tries to study the digital marketing mix of flip kart and thereby to understand the efficiency of each element of its digital mix.

**KEYWORDS**

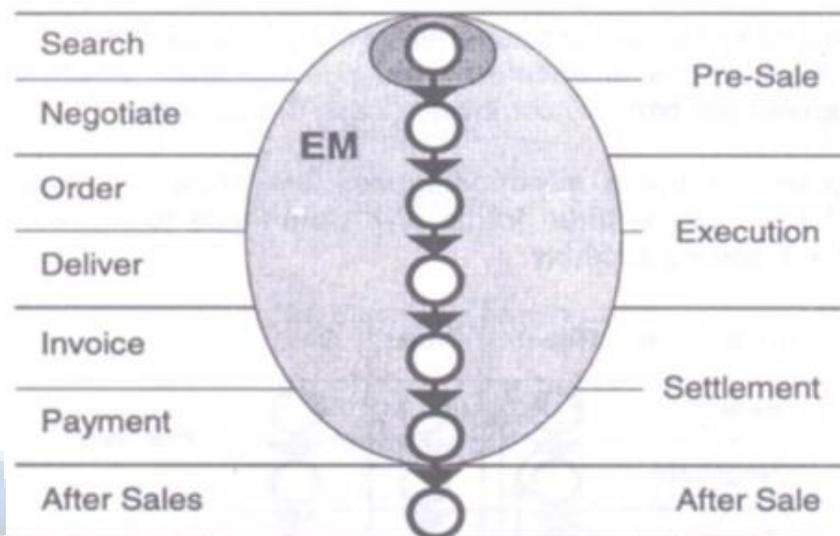
Marketing Mix, Digital Market, Digital Marketing Mix.

**INTRODUCTION**

Marketing mix was coined by E.Jerome McCarthy in 1960, American Professor of Marketing who first proposed that there are four main P's: *product, price, place and promotion* that the marketers can use in the right proportion to provide maximum satisfaction to consumers and maximum profit to the company. In modern marketing it is vital to understand how these traditional ingredients can be used in the digital market place. The old marketing mix, the four P's is getting replaced with new ones called as *Digital Marketing mix*. Digital marketing mix is essentially the same as the marketing mix. It is simply the adaptation of product, price, place and promotion to the digital marketing context. The extended marketing mix includes physical evidence, people and process when planning for marketing in online service.

**ELECTRONIC/DIGITAL MARKETS BENEFITS**

- ✓ It increases the efficiency of the market
- ✓ It reduces the search cost for the buyer & makes it more likely
- ✓ the buyer will continue the search until the best buy is found
- ✓ It Enlarges the local, national and international market

**FIG. 1****DIGITAL MARKETING MIX OF FLIPKART**

Flip kart is the largest Indian e-commerce company founded in 2007, by Sachin and Binny Bansal and headquartered in Bangalore, Karnataka. Flip kart marketing strategy during its initial years, focused on online sale of books but later it expanded to electronic goods and variety of other products. Flip kart had launched its own product range under the name "DigiFlip" with products including tablets, USBs and computer accessories, etc.... Initially, they spent Rs 400,000 for making the website to start its business. In May 2014, Flip kart received \$210 million from DST Global, in July 2014 it raised \$1 billion led by existing investors Tiger Global and South Africa's media group-Naspers and in May 2015 it raised \$550 million through many of its existing investors. Flip kart acquired Myntna.com for expanding its online fashion retail store and acquires a mobile marketing start-up Appiterate to strengthen its mobile platform. Today, Flip kart employs more than 20000 people. Its slogan, 'The Online Megastore' is very apt and popular. The company website is one of the most popular websites in India. Flip kart allows payment methods such as cash on delivery, credit or debit card transactions, net banking, e-gift voucher and card swipe on delivery.

Flip kart focuses on consumer experience and social media strategy through digital marketing mix. Brian Featherstonehaugh, Chairman and CEO of Ogilvy One Worldwide, replaced the 4Ps by the new 4Es.

- Product has become Experience
- Place has become Everyplace
- Price has become Exchange
- Promotion has become Evangelism

FIG. 2



### 1. PRODUCT

Historically, products can be touched, smelled, seen with our naked eyes in stores and its quality and value could be determined. In digital environment, the features and benefits of products need to be communicated in virtual space in different ways. Online audience can easily research, compare and find reviews all over the internet for the product they are considering to buy. For two years, Flip kart sold only books through its websites but now it offers air coolers, washing machines, air conditioner, life style products, cell phones, computers, laptops, cameras, audio players, micro ovens, water purifiers, products relating to health care, dishwashers, e-books, apparels, accessories, house hold elect., mobile technologies peripherals, wellness, books: fiction, academic, literature. Flip kart has recently introduced its personal product range called "DigiFlip". Under this brand, it offers product like computer accessories, camera, headphones, and pen drives. Flip kart introduced its own tablet phones and networking router under "DigiFlip". Flip kart has provided a platform for the launch of 'Moto G' by a special tie up with Motorola Mobility. Product performance, quality and price are ranked the top criteria for Flip kart. So their product features and benefits are real and differentiated from its competitors.

### 2. PRICE

Price will always be an important factor to consumers while making the purchase decision. Customers prefer high quality differentiated product at a competitive price in order to justify paying a higher price. Use of exclusive offers, voucher codes, money-off deals and referral discount can also push customers to purchase the products. Though Flip kart is started its business with an initial investment of just INR 400,000 today its net worth is nearly 1 billion dollars as its sales. Apart from 50% by selling books online. The company determines its price by considering the innumerable expenses like transport expense, supplier expense, packaging cost, courier charges, shipping cost, office expense, maintenance expense, depreciation, taxes, advertisement and many other expenses. Discounts up to 50% are allowed periodically to boost up the Sales and maintain competitive prices. Flip kart offers discount, contest, premium facilities, e-wallet, e-gift voucher to their customers. Flip kart also enhances its services by providing cash on delivery, debit and credit card transactions, pay zippy safe payments, vouchers available as e-gift and net banking.

### 3. PLACE

Place is the combination of decision regarding channel of distribution, transportation, warehousing and inventory control. In olden days, place means where a buyer buys the products from a physical shop. On mouse click, internet provides a wide variety of products in large scale, even globally. The digital place is a reflection of the modern technology. People can access to the product anywhere, anytime. Flip kart is owned a Singapore based company is registered over there. According to India's foreign policy, a foreign company is not allowed e-retailing over here. Therefore, in India, flip kart sells the goods through an Indian company WS Retail. The website is very easy for browsing, keeping track of products, getting reviews, ordering goods and payment methods for audience. Flip kart has made a place for itself in digital marketing. Flip kart has inventories in four major centers- Mumbai, Delhi, Bangalore and Kolkata. At least 80% of the orders placed are handled and controlled via ware houses. It provides delivery services using e-kart and postal service. The company has covered all tier one cities, major tier two and tier three cities.

### 4. PROMOTION

Traditionally promotion refers to the ways in which products were promoted offline. This was done through television or radio advertising, print or outdoor advertising. But in digital marketing, promotion tactics can be reinforced through creating connections and engagement with online audience. Flip kart has changed the concept of multi brand retailing through internet in India. Flip kart has promoted their products by using different tools like e-mail marketing, advertising, online marketing, use of media, word of mouth to promote their sales. It operates mostly through mouth advertising and used the services of Google Ad-words and Search Engine Optimization. Downloading the exclusive app of flip kart helps in getting alert about the current offers, older status, price drops, recent launches and various gift coupons.

### CONCLUSION

Flip kart is the most prominent online retailer in India which has prioritized customer satisfaction. The company has adopted digital marketing mix as its set of marketing tools to pursue its marketing objectives in the global market. The company has set a bench mark of excellence by being more real times, customer centric and scalable in their overall approach to digital marketing. It has proven that it is always a step ahead than its competitors because of its use of new channels of marketing and technology which meets the requirements of digital marketing. Flip kart competitive approach towards four E's yields a global market.

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**BIG DATA USING HADOOP MAP REDUCE****TAYYABA HASHMI****STUDENT****ME INFORMATION TECHNOLOGY****SHAH & ANCHOR KUTCHHI ENGINEERING COLLEGE****CHEMBUR****PRAMILA SHINDE****ASST. PROFESSOR****SHAH & ANCHOR KUTCHHI ENGINEERING COLLEGE****CHEMBUR****ABSTRACT**

*Big data is an all-encompassing term for any collection of data sets so large and complex that it becomes difficult to process them using traditional data processing applications. Big data usually includes data sets with sizes beyond the ability of commonly used software tools to capture, curate, manage, and process data within a tolerable elapsed time. Big data size is a constantly moving target, as of 2012 ranging from a few dozen terabytes to many petabytes of data. Big data is a set of techniques and technologies that require new forms of integration to uncover large hidden values from large datasets that are diverse, complex, and of a massive scale. Big data can also be defined as "Big data is a large volume unstructured data which cannot be handled by standard database management systems like DBMS, RDBMS or ORDBMS".*

**KEYWORDS**

big data analysis, HDFS, map reduce.

**1. INTRODUCTION****1.1 OVERVIEW**

**B**ig Data may well be the Next Big Thing in the IT world. Big data burst upon the scene in the first decade of the 21st century. The first organizations to embrace it were online and startup firms. Firms like Google, eBay, LinkedIn, and Facebook were built around big data from the beginning. Like many new information technologies, big data can bring about dramatic cost reductions, substantial improvements in the time required to perform a computing task, or new product and service offerings.

Big Data' is similar to 'small data', but bigger in size but having data bigger it requires different approaches. It is an aim to solve new problems or old problems in a better way. Big Data generates value from the storage and processing of very large quantities of digital information that cannot be analyzed with traditional computing techniques. Due to its specific nature of Big Data, it is stored in distributed file system architectures[1].

Scientists regularly encounter limitations due to large data sets in many areas, including meteorology, genomics, connectomics, complex physics simulations, biological and environmental research, and in e-Science in general. The limitations also affect Internet search, finance and business informatics. Data sets grow in size in part because they are increasingly being gathered by ubiquitous information-sensing mobile devices, aerial sensory technologies (remote sensing), software logs, cameras, microphones, radio-frequency identification (RFID) readers, and wireless sensor networks.

Big data is difficult to work with using most relational database management systems and desktop statistics and visualization packages, requiring instead "massively parallel software running on tens, hundreds, or even thousands of servers". What is considered "big data" varies depending on the capabilities of the organization managing the set, and on the capabilities of the applications that are traditionally used to process and analyze the data set in its domain.

Big Data is a moving target; what is considered to be "Big" today will not be so years ahead. "For some organizations, facing hundreds of gigabytes of data for the first time may trigger a need to reconsider data management options. For others, it may take tens or hundreds of terabytes before data size becomes a significant consideration."

**FIG. 1: BIG DATA SCENARIO****1.2 GENESIS OF BIG DATA**

In a 2001 research report and related lectures, META Group (now Gartner) analyst Doug Laney defined data growth challenges and opportunities as being three-dimensional, i.e. increasing volume (amount of data), velocity (speed of data in and out), and variety (range of data types and sources). Gartner, and now much of the industry, continue to use this "3Vs" model for describing big data. In 2012, Gartner updated its definition as follows: "Big data is high volume, high velocity, and/or high variety information assets that require new forms of processing to enable enhanced decision making, insight discovery and process optimization." Additionally, a new V "Veracity" is added by some organizations to describe it. One of the fundamental characteristics of the Big Data is the huge volume of data represented by heterogeneous and diverse dimensionalities[2].

If Gartner's definition (the 3Vs) is still widely used, the growing maturity of the concept fosters a more sound difference between big data and Business Intelligence, regarding data and their use:

- Business Intelligence uses descriptive statistics with data with high information density to measure things, detect trends etc.
- Big data uses inductive statistics and concepts from nonlinear system identification to infer laws (regressions, nonlinear relationships, and causal effects) from large sets of data with low information density to reveal relationships, dependencies and perform predictions of outcomes and behaviors.

## 2. REVIEW OF LITERATURE

### 2.1 THREE KEY TECHNOLOGIES FOR EXTRACTING BUSINESS VALUE FROM BIG DATA

Big data technologies describe a new generation of technologies and architectures, designed to economically extract value from very large volumes of a wide variety of data by enabling high-velocity capture, discovery and/or analysis. Furthermore, this analysis is needed in real time or near-real time, and it must be affordable, secure and achievable. NASA uses advanced information systems to mature big data capacity in order to support future Earth observation missions[3]. Here are three key technologies that can help you get a handle on big data – and even more importantly, extract meaningful business value from it.

- Information management for big data. Manage data as a strategic, core asset, with ongoing process control for big data analytics.
- High-performance analytics for big data. Gain rapid insights from big data and the ability to solve increasingly complex problems using more data.
- Flexible deployment options for big data. Choose between options for on premises or hosted, software-as-a-service (SaaS) approaches for big data and big data analytics.

### 2.2 INFORMATION MANAGEMENT FOR BIG DATA

Since recent developments (in technology, science, user habits, businesses, etc.) gave rise to production and storage of massive amounts of data, not surprisingly, the intelligent analysis of big data has become more important for both businesses and academics[4]. SAS provides the management and governance capabilities that enable organizations to effectively manage the entire life cycle of big data analytics, from data to decision. SAS provides a variety of these solutions, including data governance, metadata management, analytical model management, run-time management and deployment management. With SAS, this governance is an ongoing process, not just a one-time project. Proven methodology-driven approaches help organizations build processes based on their specific data maturity model.

### 2.3 HIGH-PERFORMANCE ANALYTICS FOR BIG DATA

High-performance analytics makes it possible to analyze all available data (not just a subset of it) to get precise answers for hard-to-solve problems and uncover new growth opportunities and manage unknown risks – all while using IT resources more effectively. System elasticity or hardware heterogeneity and multigrain parallelism cannot be taken into account easily: instead, a new programming model would have to be chosen, and the development process restarted[5]. Accelerated processing of huge data sets is made possible by following technologies:

- Grid computing: A centrally managed grid infrastructure provides dynamic workload balancing, high availability and parallel processing for data management, analytics and reporting. Multiple applications and users can share a grid environment for efficient use of hardware capacity and faster performance, while IT can incrementally add resources as needed.
- In-database processing: Moving relevant data management, analytics and reporting tasks to where the data resides improves speed to insight, reduces data movement and promotes better data governance. Using the scalable architecture offered by third-party databases, in-database processing reduces the time needed to prepare data and build, deploy and update analytical models.

### 2.4 FLEXIBLE DEPLOYMENT OPTIONS FOR BIG DATA

For some organizations, it won't make sense to build the IT infrastructure to support big data, especially if data demands are highly variable or unpredictable. Those organizations can benefit from cloud computing, where big data analytics is delivered as a service and IT resources can be quickly adjusted to meet changing business demands. Our purpose is to utilize Apache CloudStack to manage infrastructure resource by constructing a private cloud, and then integrate relational and NoSQL database for storing multiple datasets[6].

### 2.5 TOOLS USED IN BIG DATA - MAP REDUCE

MapReduce [1-2] is a programming model for processing large-scale datasets in computer clusters. The MapReduce programming model consists of two functions, map() and reduce(). Users can implement their own processing logic by specifying a customized map() and reduce() function. The map() function takes an input key/value pair and produces a list of intermediate key/value pairs. The MapReduce runtime system groups together all intermediate pairs based on the intermediate keys and passes them to reduce() function for producing the final results.

Map

(in\_key, in\_value) --->list(out\_key,intermediate\_value)

Reduce

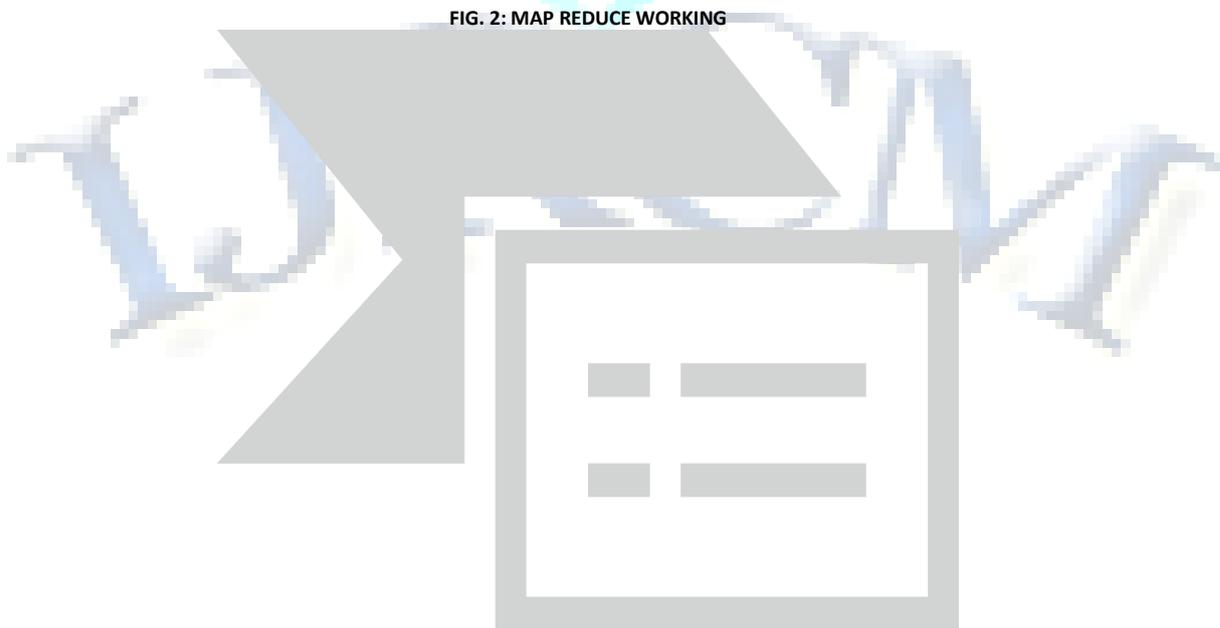
(out\_key,list(intermediate\_value)) -->list(out\_value)

The signatures of map() and reduce() are as follows :

map (k1,v1) ! list(k2,v2)and reduce (k2,list(v2)) !

list(v2)

FIG. 2: MAP REDUCE WORKING



2.6 ADVANCEMENTS

The power of MapReduce derives from providing an abstraction that allows developers to harness the power of large clusters but abstractions manage complexity by hiding details and presenting well-defined behaviours to users of those abstractions. This process makes certain tasks easier, but others more difficult, if not impossible. To reduce the computation and to focus the mining for the latter situations, we propose a data science solution that uses MapReduce to mine uncertain Big data for frequent patterns satisfying user-specified anti-monotonic constraints[7]. MapReduce is certainly no exception to this generalization, even within the Hadoop/HDFS/MapReduce ecosystem; it is already observed the development of alternative approaches for expressing distributed computations. For example, there can be a third merge phase after map and reduce to better support relational operations. Join processing mentioned in the paper can also tackle the Map Reduce tasks effectively. The future directions in Big Data analysis gives a very encouraging picture paradigm of HDFS and Hadoop, overcoming the existing drawback of the present systems and the advantages it provides.

3. REPORT ON PRESENT INVESTIGATION

3.1 PROBLEM

Big data is set to offer companies tremendous insight. More recently, Big Data has made its appearance in the shared mindset of researchers, practitioners, and funding agencies, driven by the awareness that concerted efforts are needed to address 21st century data collection, analysis, management, ownership, and privacy issues[8]. But with terabytes and petabytes of data pouring in to organizations today, traditional architectures and infrastructures are not up to the challenge. IT teams are burdened with ever-growing requests for data, ad hoc analyses and oneoff reports. Decision makers become frustrated because it takes hours or days to get answers to questions, if at all. More users are expecting self-service Data visualization is becoming an increasingly important component of analytics in the age of big data. access to information in a form they can easily understand and share with others. This begs the question: How do you present big data in a way that business leaders can quickly understand and use? This is not a minor consideration. Mining millions of rows of data creates a big headache for analysts tasked with sorting and presenting data. Organizations often approach the problem in one of two ways: Build “samples” so that it is easier to both analyze and present the data, or create template charts and graphs that can accept certain types of information. Both approaches miss the potential for big data. Instead, consider pairing big data with visual analytics so that you use all the data and receive automated help in selecting the best ways to present the data. This frees staff to deploy insights from data. Think of your data as a great, but messy, story. Visual analytics is the master filmmaker and the gifted editor who bring the story to life. Grouping data together, or “binning,” can help you easily visualize large quantities of data, including outliers. 1 Meeting the need for speed In today's hypercompetitive business environment, companies not only have to find and analyze the relevant data they need, they must find it quickly. Visualization helps organizations perform analyses and make decisions much more rapidly, but the challenge is going through the sheer volumes of data and accessing the level of detail needed, all at a high speed. The challenge only grows as the degree of granularity increases. One possible solution is hardware. Some vendors are using increased memory and powerful parallel processing to crunch large volumes of data extremely quickly. Another method is putting data in-memory but using a grid computing approach, where many machines are used to solve a problem. Both approaches allow organizations to explore huge data volumes and gain business insights in near-real time. 2 Understanding the data It takes a lot of understanding to get data in the right shape so that you can use visualization as part of data analysis. For example, if the data comes from social media content, you need to know who the user is in a general sense – such as a customer using a particular set of products – and understand what it is you're trying to visualize out of the data. Without some sort of context, visualization tools are likely to be of less value to the user. One solution to this challenge is to have the proper domain expertise in place.

3.2 SOLUTION

Apache Hadoop is an open-source software framework written in Java for distributed storage and distributed processing of very large data sets on computer clusters built from commodity hardware. All the modules in Hadoop are designed with a fundamental assumption that hardware failures (of individual machines, or racks of machines) are commonplace and thus should be automatically handled in software by the framework. HDFS helps in efficient management of Big data.

The core of Apache Hadoop consists of a storage part (Hadoop Distributed File System (HDFS)) and a processing part (MapReduce). Hadoop splits files into large blocks and distributes them amongst the nodes in the cluster. To process the data, Hadoop MapReduce transfers packaged code for nodes to process in parallel, based on the data each node needs to process. This approach takes advantage of data locality<sup>[3]</sup>—nodes manipulating the data that they have on hand—to allow the data to be processed faster and more efficiently than it would be in a more conventional supercomputer architecture that relies on a parallel file system where computation and data are connected via high-speed networking.

3.3 IMPLEMENTATION

The user configures and submits a MapReduce job (or just *job* for short) to the framework, which will decompose the job into a set of map tasks, shuffles, a sort, and a set of reduce tasks. The framework will then manage the distribution and execution of the tasks, collect the output, and report the status to the user. The job consists of the parts shown in Figure 3 and listed in Table 1.

FIG. 3: PARTS OF A MAPREDUCE JOB

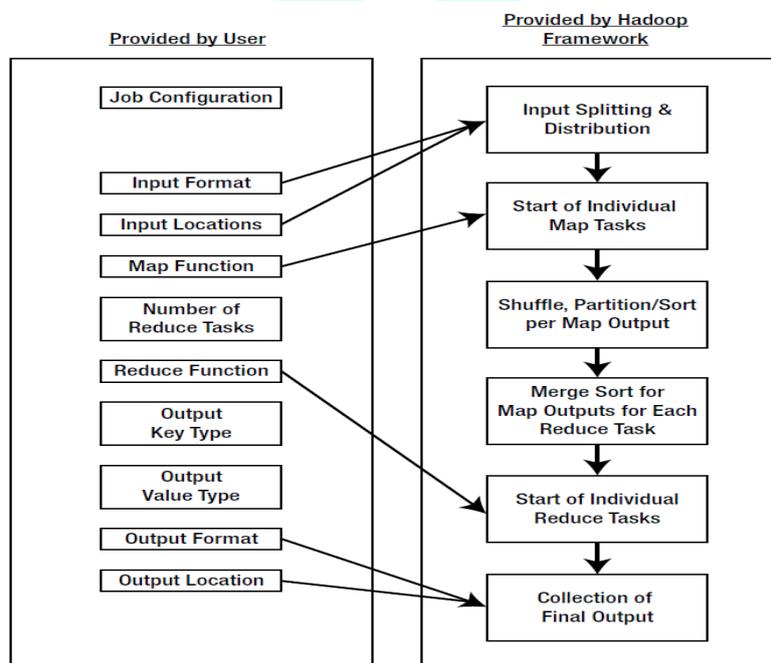


TABLE 1: PARTS OF A MAPREDUCE JOB

Part	Handled By
Configuration of the job	User
Input splitting and distribution	Hadoop framework
Start of the individual map tasks with their input split	Hadoop framework
Map function, called once for each input key/value pair	User
Shuffle, which partitions and sorts the per-map output	Hadoop framework
Sort, which merge sorts the shuffle output for each partition of all map outputs	Hadoop framework
Start of the individual reduce tasks, with their input partition	Hadoop framework
Reduce function, which is called once for each unique input key, with all of the input values that share that key	User
Collection of the output and storage in the configured job output directory, in $N$ parts, where $N$ is the number of reduce tasks	Hadoop framework

The user is responsible for handling the job setup, specifying the input location(s), specifying the input, and ensuring the input is in the expected format and location. The framework is responsible for distributing the job among the TaskTracker nodes of the cluster; running the map, shuffle, sort, and reduce phases; placing the output in the output directory; and informing the user of the job-completion status.

#### 4. RESULTS AND DISCUSSIONS

Big data are datasets that grow so large that they become awkward to work with using on-hand database management tools. Difficulties include capture, storage, search, sharing, analytics, and visualizing. This trend continues because of the benefits of working with larger and larger datasets allowing analysts to "spot business trends, prevent diseases, combat crime." Though a moving target, current limits are on the order of terabytes, exabytes and zettabytes of data. Scientists regularly encounter this problem in meteorology, genomics, biological research, Internet search, finance and business informatics. Data sets also grow in size because they are increasingly being gathered by ubiquitous information-sensing mobile devices, "software logs, cameras, microphones, RFID readers, wireless sensor networks and so on." Cloud computing helps organizations store, manage, share, and analyze their Big Data in an affordable and easy-to-use way. Today's cloud Infrastructure-as-a-Service (IaaS) providers such as Microsoft, GoGrid, Amazon, Google, Rackspace and Slicehost, supported by the on-demand analytics solution vendors, make Big Data analytics very affordable. As humans explore the real world through scientific research, humans unravel the mysteries in the information world through big data and data mining, which are attracting much attention from academia[9]. Java and other JVM-based languages play an important role in the Hadoop and Big Data ecosystem[10].

#### 5. FUTURE SCOPE

We regard Big Data as an emerging trend and the need for Big Data is arising in all sciences and engineering fields. With Big Data technologies, we will hopefully be able to provide most relevant and most accurate social sensing feedback to better understand our society. We can further stimulate the participation of the public audiences in the data production circle for societal and economical places. The development and efficient use of big data extends the scope of human activities. It requires proper attention from academia, industry and government. The world has been integrating on a global scale. Human is enforced to change mode from the local to the global in their everyday life. It redefines the relationship among individuals, businesses, governments, and societies through networked thinking and further to improve the human living environment, to enhance the quality of public services, to improve performance, efficiency and productivity through the intelligentized interactive operating. The technological progress and industrial upgrading of big data will create new markets, new business models and new industry rules, and more importantly it demonstrates the collective will of a country that looking for strategic and economic advantage. Although there is still a large gap to gain data intelligence like human wisdom big data is a promising topic and it certainly helps us to understand the world.

#### 6. CONCLUSIONS

Big Data analysis tools like Map Reduce and HDFS, promises to help organizations better understand their customers and the marketplace, hopefully leading to better business decisions and competitive advantages. The need to process enormous quantities of data never been greater. Not only are terabyte- and petabyte-scale datasets rapidly becoming common place, but there is consensus that great value lies buried in them. In the commercial sphere, business intelligence, driven by the ability to gather data from an array of sources. For engineers building information processing tools and applications, large and heterogeneous datasets which are generating continuous flow of data, lead to more effective algorithms for a wide number of tasks, from machine translation to spam detection. In the natural and physical sciences, the ability to analyse massive amounts of data may provide the key to unlocking the secrets of the cosmos. MapReduce can be exploited to solve a variety of problems related to text processing at scales that would have been unthinkable few years back.

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**INVESTORS PREFERENCE TOWARDS VARIOUS INVESTMENT OPTIONS**

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**ABSTRACT**

*In the economic world money becomes multiple through making investment. Investment is called the employment of funds to various assets with the objective of receiving additional income in value over a given period of time. Today investors have various attractive options of investment with different features according to their requirement. But attention should be paid that the return is maximized with minimum risk which is inherent in all investments. The study examines investor objective, preference, perception, and risk-return. It aims to finding out the preference of investor towards various investment options specially in Hanumangarh city. The primary data is collected through the structured questionnaire. The objective of this research paper is to analyse various investment options. It also provides awareness to the general public about the investment. The present investigation outlined regarding the preference of investor towards various investment options in term of safety, maturity, growth, regular income and capital gain.*

**KEYWORDS**

investor preference, investment options, risk return.

**INTRODUCTION**

Today Investment culture is an important requirement for capital formation and also the quicker growth of associate economy among the people. Investor is a person that invest money in various investment option for specific objective. Investors' perceptions and preferences incorporates a bigger impact within the formulation of policies for the event and regulation of security markets and therefore protective and promoting little and home investors. This study analyses the investment pattern of the investors with respect to different investment avenues and their awareness. An investment strategy is a set of rules, regulation, designed to guide an investor's selection of an investment portfolio. Strategy will be designed around the investor's risk-return. Some investor will prefer to maximize returns and some investor prefers to minimize risk so they invest money according to their priority with selected strategy. The Ideal Investment strategy should be customized one for each investor depending on his risk-return profile, his satisfaction level, income, and expectations. Accurate planning gives accurate result and for that there must be an efficient and trustworthy roadmap to achieve the ultimate goal of wealth maximization. There are various investment alternatives are available to the investors. Some of them are more risky and some of these are less risky. The investors have to choice proper alternative among them, depending of his specific objective, risk, and return like investment in shares, debentures, bonds, postal saving scheme, investment in gold, real estate, life insurance investment etc.

**INVESTMENT DECISION**

People invest to improve our monetary wealth, present and future both. Funds to be invested come from assets already owned, borrowed money and saving or foregone consumption. By foregoing their consumption today and investing the savings, investor expects to enhance their future consumption possibilities by increasing the wealth. Investors also manage their wealth and protecting it from inflation, taxes and other factors. Some people may wish to improve the return from their saving account funds by investing in alternatives.

**SAFETY-** It is the foremost criteria for investment decision of any company. It is the probability of getting back the money invested.

**LIQUIDITY-** The liquidity of an instrument refers to the ability of the investor to convert it into cash on short notice without incurring any loss. An instrument will give definite return if it is held till maturity, but risk of loss is high if sold prematurely.

**RETURN-** The yield of an instrument is the return earned from it by way of interest, dividend and capital appreciation. Some instrument does not pay interest but are redeemed at face value. Yield of an instrument is measured in post tax terms.

**MATURITY PERIOD-** It is the life instrument. While some instruments have fixed original maturities other cannot have. Normally, the longer the maturity period, the greater the return.

**FACTORS EFFECTING INVESTMENT**

Today investors choose their option through financial institutes and online investment firms. There are various factors that effects investment.

- **Time horizon-** Investors choosing investment is how long their money will remain invested.
- **Risk Tolerance-** Risk tolerance refers to how comfortable an investor would like to invest money. Returns are depending on risk tolerance level. Higher risk in investments has higher profit and vice versa.

**Investment Knowledge-** An investor's experience and knowledge are important factors in her investment choices. Some Investors may choose their investment with the help of family, friends and advisor. Experienced investors often choose their own investments. Understanding the risk and return potential helps to decide the portfolio.

- **Income and Net Worth-** An individual's income and net worth are also important factors in making investment choices that how much income would investor like to invest.

**REVIEW OF LITERATURE**

Prof . Koti Kartikey (2014) emphasized that Salaried and business persons search for higher returns in less time and thus select the investments in several avenues. Though there are quite sensible variety of investors within the exchange, however their proportion of investment available market is extremely less. Most of the folks would really like to save lots of their earnings keeping future life (health) and residential purchase as their primary goals of investment. Investors like investment in bank deposits, property to investment available market. Investors think about net, news channel and papers, family and friends to be their effective investment supply. Investment pattern rely upon the education level, financial gain and savings level.

- Razia Sehdev1\*, Pranav Ranjan2 (2014) the study collectively examines the investment objectives undertaken by investors whereas finance in money Instruments and finds out the extremely preferred supply of knowledge for numerous investments choices to speculate in their most popular money Instrument. It collectively helps to look at the Impact of assorted demographic variables on investor's investment Behaviors.
- Agrawal Gaurav , Dr. faith mini (2013) highlighted that totally different types of investment avenues square measure offered to the investors. An capitalist tries to balance these advantages and shortcomings of various investment modes before finance in them. During this paper, an effort is created to review in the main the investment avenue most popular by the investors of Mathura, and beneath this study tried to investigate the investor's preference towards investment in mutual funds once alternative investment avenues also are offered within the market. Once analyzing & decoding the information received from the respondents, it going to be terminated that most investors square measure aware of Banks & LIC investment avenues solely. Quite eightieth investors square measure aware of Mutual Funds, assets, and National Security Council investment avenues. Choice supported their criteria or goal like safety higher come low risk etc.
- V. Alagu Pandian, G. Thangadurai (2013) Conducted beneath the study that a spread of investment avenues square measure offered. All the investors invest their surplus cash within the on top of mentioned avenues supported their risk taking perspective. "No pain no gain" its the golden principle of investment management. a lot of risk ends up in a lot of profit. Investors cannot avoid risk however they will minimize the danger by finance their cash in numerous types of investments so they will get a moderate profit. Therefore the man of science has terminated that almost all of the investors like bank deposits followed by gold investment within the study space. beneath this study awareness of individuals towards numerous investment avenues and investor's preference towards.
- V.R.Palanivelu & K.Chandrakumar (2013) highlights that sure factors of salaried workers like education level, awareness regarding this economic system, age of investors etc. create vital impact whereas deciding the investment avenues.
- Lalit Mohan Kathuria & Kanika Singhanian (2012) terminated that personal sector banking workers were finance a bigger portion of their savings into safe and unhazardous investment avenues, like worker provident fund, public provident fund and insurance policy and solely forty per cent of the respondents had high level of awareness concerning numerous investment avenues.
- Kothari Heena (2012) Examined that money plays a vital role in each person's life. everybody invests their cash for securing future and overcome the issues. Savings of the folks square measure endowed in assets betting on their risk and come demands, Safety of cash, Liquidity, the offered avenues for investment, numerous money establishments etc. This study, an analysis has been created into most popular investor's behavior towards investment avenues in Indore town. It's conjointly studied the totally different the various cohort folks like different choice. Investment choice provides higher come and growth prospects. Survey findings of this study have gotten vital social control implications which will be employed by investment corporations in restructuring their existing practices and eventually innovating new ways in which of service delivery.

### NEED OF THE STUDY

This study is an efforts regarding indepth analysis of varied investment choices. It additionally focuses on awareness level of the general public regarding the investmens. Under this research the analysis has been done to find the reasons behind choosing the alternatives specially in indian small cities such as Hanumangarh town. ,

### STATEMENT OF PROBLEM

The objective of the study is to analyse the capitalist behavior toward numerous investment choices and to analysis the issue moving the perspective. The problem becomes more relevant because capitalist have numerous choice (like investment company, fastened deposits, share, assets, gold, life assurance real estate etc.) to settle their position as an investor. Investors opt for different choices related with their mind, awareness, data, trend return ,safety etc.

### OBJECTIVES OF THE STUDY

- To study the attitude of investors with respect of financial institute and financial product.
- To find out the information level of the investors in Hanumangarh city about investment options.
- To study the investor objective towards choosing investment option out of many.
- To analysis the investment pattern preferred by investor.

### HYPOTHESIS

H<sub>0</sub> -: There is no significant difference in investor preference towards various investment options.

H<sub>1</sub> -: There is a significant difference in investor preference towards various investment options.

### RESEARCH METHODOLOGY

Some investor want to safe their money so they deposit as a fixed deposit or real estate or gold and some investor want higher profit so they invest in mutual fund or share, debenture. Under my study the people of Hanumangarh city much aware about the options and this awareness helps them to enhance their knowledge and gain.

For the purpose of this study 150 questionnaires fill by customers of companies and banks in Hanumangarh. The percentage method ,pie charts bar diagram and other statistical methods have been used .The sources of data would be primary and secondary. The data is obtained through a structured questionnaire. Questionnaire used to collect information about investor performance towards mutual fund. The data will be collected from books, journals, articles, research papers, newspapers and reports of Securities and Exchange Board of India (SEBI), Association of Mutual Fund of India (AMFI), Reserve Bank of India (RBI) and other authorized sources of data.The analysis of data collection is completed and presented systematically. Data analyzed by Percentage method and Growth analysis method. Under this investment pattern had also analyzed.

### RESULT AND DISCUSSION

#### Kind of most preferred instrument

#### A.) EQUITY SHARES

TABLE 1

S.NO.	OPTION	NUMBER OF RESPONDENT	PERCENTAGE
1.	1 <sup>st</sup> Rank	10	6.67
2.	2 <sup>nd</sup> Rank	10	6.67
3.	3 <sup>rd</sup> Rank	9	6
4.	4 <sup>th</sup> Rank	12	8
5.	5 <sup>th</sup> Rank	33	22
6.	6 <sup>th</sup> Rank	33	22
7.	7 <sup>th</sup> Rank	43	28.66
	TOTAL	150	100

(B) FIXED DEPOSIT

TABLE 2

S.NO.	OPTION	NUMBER OF RESPONDENT	PERCENTAGE
1.	1 <sup>st</sup> Rank	59	39.33
2.	2 <sup>nd</sup> Rank	48	32
3.	3 <sup>rd</sup> Rank	19	12.67
4.	4 <sup>th</sup> Rank	13	8.67
5.	5 <sup>th</sup> Rank	6	4
6.	6 <sup>th</sup> Rank	2	1.33
7.	7 <sup>th</sup> Rank	3	2
	TOTAL	150	100

Under the above these graphs People have given the ranking to investment options according to their preference. Under this majority of the People gave 1<sup>st</sup> rank to fixed deposit because it is a kind of safe deposit with fix rate of return. 2<sup>nd</sup> rank gave to gold because it is a long term investment with security. 3<sup>rd</sup> gave to life insurance because of tax benefit. And the 4<sup>th</sup> rank gave to real estate because investor invest high proportion of their income in real estate due to it's a feature of long term investment and generate extraordinary income. 5<sup>th</sup> rank gave to mutual fund because in Hanumangarh, People are not aware about mutual fund. 6<sup>th</sup> rank gave to debenture because People don't have knowledge about it. At last 7<sup>th</sup> rank gave to shares because People think it's like a gambling so they are not interested to invest money.

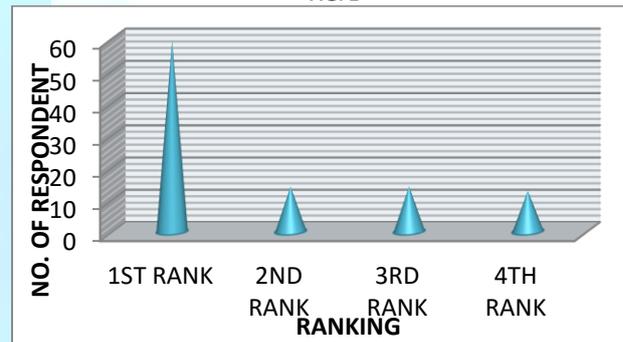
PREFERENCE CRITERIA

A. Safety

TABLE 3

S.NO.	OPTION	NUMBER OF RESPONDENT	PERCENTAGE
1.	1 <sup>st</sup> Rank	89	59.33
2.	2 <sup>nd</sup> Rank	21	14
3.	3 <sup>rd</sup> Rank	21	14
4.	4 <sup>th</sup> Rank	19	12.67
	TOTAL	150	100

FIG. 1



CONE SHAPED GRAPH SHOWING RANKING FOR SAFETY WHILE INVESTING MONEY

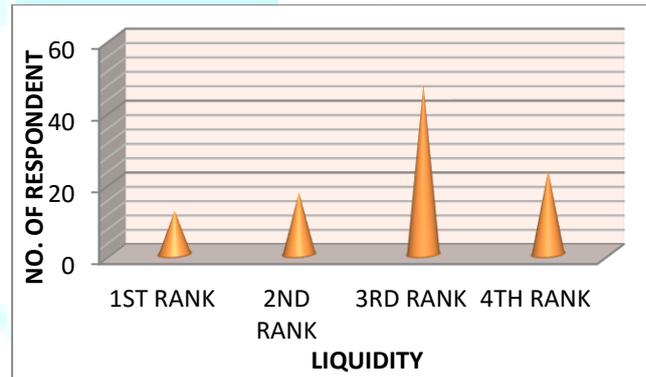
Under this figure 59.33% People gave 1<sup>st</sup> rank to safety. Safety is the main feature while making an investment.

B.) LIQUIDITY

TABLE 4

S.NO.	OPTION	NUMBER OF RESPONDENT	PERCENTAGE
1.	1 <sup>st</sup> Rank	18	12.10
2.	2 <sup>nd</sup> Rank	26	17.33
3.	3 <sup>rd</sup> Rank	71	47.33
4.	4 <sup>th</sup> Rank	35	23.34
	TOTAL	150	100

FIG. 2



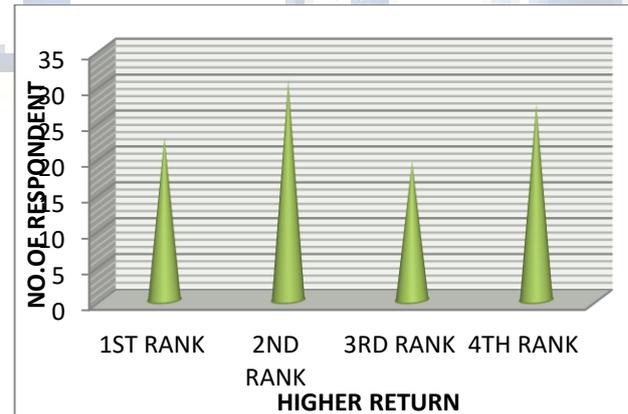
Under this figure 47.33% People gave 3<sup>rd</sup> rank to liquidity. If people need money, they want to have it in a liquid form (Cash in hand).

C.) HIGHER RETURNS

TABLE 5

S.NO.	OPTION	NUMBER OF RESPONDENT	PERCENTAGE
1.	1 <sup>st</sup> Rank	34	22.67
2.	2 <sup>nd</sup> Rank	46	30.67
3.	3 <sup>rd</sup> Rank	29	19.33
4.	4 <sup>th</sup> Rank	41	27.33
	TOTAL	150	100

FIG. 3



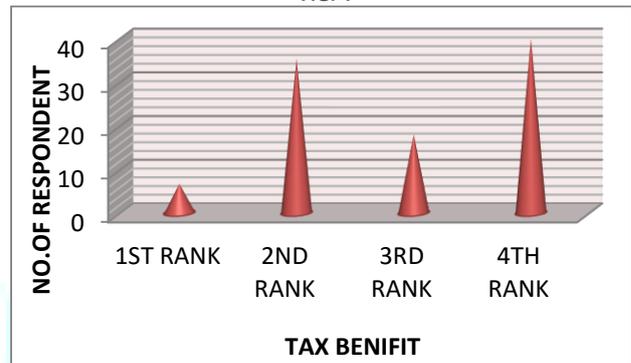
Under this figure 30.67 % People wants higher return so they gave it 2<sup>nd</sup> rank. Because the main purpose behind investment is higher return.

D.) TAX BENEFIT

TABLE 6

S.NO.	OPTIONS	NUMBER OF RESPONDENT	PERCENTAGE
1.	1 <sup>st</sup> Rank	10	6.67
2.	2 <sup>nd</sup> Rank	53	35.33
3.	3 <sup>rd</sup> Rank	27	18
4.	4 <sup>th</sup> Rank	60	40
	TOTAL	150	100

FIG. 4



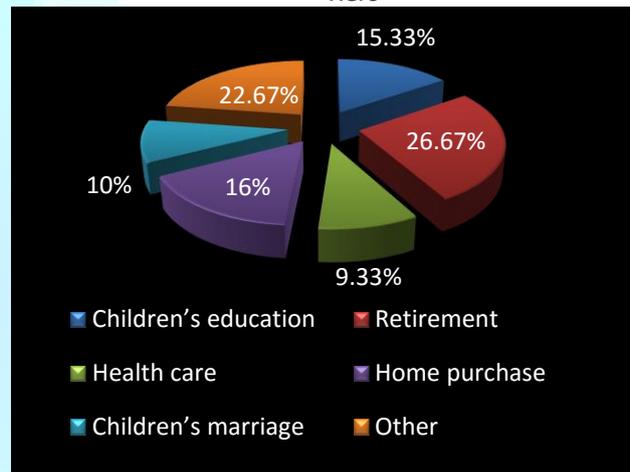
Under this figure 40% People gave fourth rank to Tax benefit while investing money. Because tax saving is last purpose for an investor.

SAVING OBJECTIVE

TABLE 7

S.NO	OPTION	NUMBER OF RESPONDENT	PERCENTAGE
1.	Children's education	23	15.33
2.	Retirement	40	26.67
3.	Health care	14	9.33
4.	Home purchase	24	16
5.	Children's marriage	15	10
6.	Other	34	22.67
	TOTAL	150	100

FIG. 5



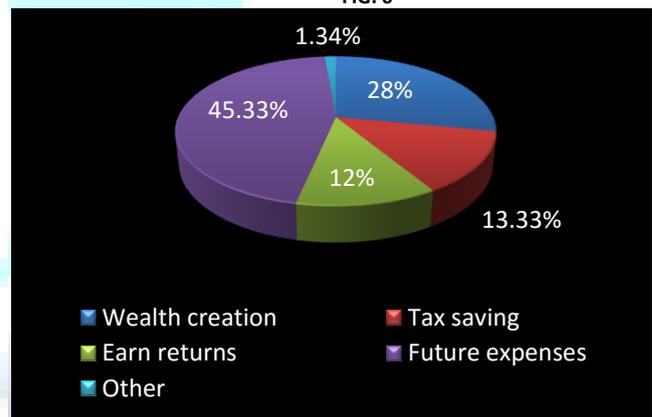
The above figure shows the saving objective of investor. There are various objectives for investment and the investors invest money according to their preference. Under this maximum figure 26.67% investor invest money for retirement.

PURPOSE OF INVESTMENT

TABLE 8

S.NO	OPTION	NUMBER OF RESPONDENT	PERCENTAGE
1.	Wealth creation	42	28
2.	Tax saving	20	13.33
3.	Earn returns	18	12
4.	Future expenses	68	45.33
5.	Other	2	1.34
	TOTAL	150	100

FIG. 6



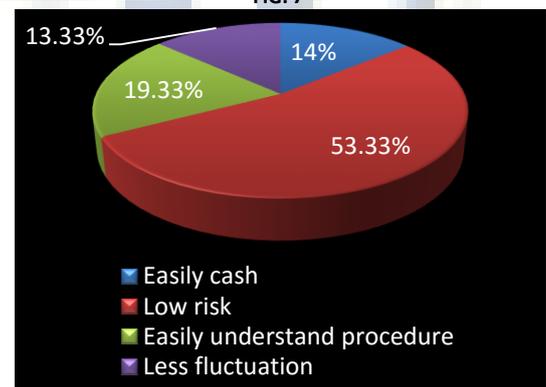
The above figures explain about the purpose behind investment and the majority of investor 45.33% invests money for their future expenses.

MOST PREFERRED FEATURE IN INVESTMENT

TABLE 9

S.NO.	OPTION	NUMBER OF RESPONDENT	PERCENTAGE
1.	Easily cash	21	14
2.	Low risk	80	53.33
3.	Easily understand procedure	29	19.33
4.	Less fluctuation	20	13.33
	TOTAL	150	100

FIG. 7



The above figure shows features of investment. Under this 14% People wants easily cash, 53.33% People wants low risk and 19.33% People think easily understand procedure and 13.33% People wants less fluctuation.

## FINDINGS

All the respondents which are surveyed are more male respondent than female wherein maximum investors have shown their preference in safety of funds. Women are found less focused towards the investment although they are found inclined to the savings for future. Salaried and professionals are saving more for their retirement. Fixed deposits and real estate investment are found most popular saving in individual investors.

People developed more trust in Government sponsored saving schemes which has wider acceptance by both male and females.

It has been observed that appreciation and tax saving was the main objective or investment for all income level.

Study shows that among the various alternatives fixed deposit and gold are the most preferable investment tools for investment, because they provide safety with fix rate of interest.

Whereas young people or business person wants higher return so they prefer to invest money in share market and mutual funds. The age groups of above 40 people invest in fixed deposit, gold, real estate to secure their money with fix rate of interest (increase in age decrease the risk tolerance level).

From the survey it has been found that people who are not invest in share market they think it's like a gambling.

It has been observed that the investment decisions are based on their own initiative.

Survey shows that Investment is based on income level.

It is found that mostly business person invest their money for tax saving.

Survey shows that majority of the people prefer to invest money in government sector.

From the survey it is found that low risk is the main feature while making an investment.

## SUGGESTIONS

As the financial behaviour of individual investors has been found a linked with the various available investment options and preference, the young investors are not very serious about the investment and the researcher found that there is lesser level of awareness among the women about the investment. So, there is a need to increase the awareness amongst the female and youth about investment.

- ❖ Companies should arrange seminars, workshops conferences to make the people can aware about the various product and services.
- ❖ There is a need to improve the knowledge of investor regarding the investment alternative, as there are most of the respondent who's having investment in fixed deposit and gold only. So, they can diversify their investment.
- ❖ There is need for improvement in the knowledge of investor regarding various sector except government sector, they provide more advantage and good rate of return.
- ❖ Before investing money investor discuss their investment object with financial advisor, who provide proper guidelines for the portfolio management.
- ❖ People can choose those alternatives that provide maximum risk coverage facility through market analysis.
- ❖ Companies and banks can introduce new schemes for those people who have limited amount to invest.
- ❖ Make investment in share market and avoid day trading because day trading is more risky.
- ❖ Those who monitor their investment occasionally are suggested to monitor on regular basis and make changes if there are greater risk of sinking of funds

## CONCLUSION

In a nutshell the choice of investment options should depend on investor's preference and analysis of market's situation. In a less volatile market, if security and liquidity preference is factors that investors are looking for, banks will be a proper choice. But if investors seek for the high rate of return, buying common stocks will match this purpose. On the contrary, to invest in common stocks, investors have to prepare for any loss that may occur due to a risky of the market. Investment has now become a necessity and every earning person prefer to invest their money safely with higher rate of return. The individual people have their own perception towards investment option. The study of research work focused on some alternatives in which the people of Hanumangarh make their investment in fixed deposit, gold, real estate, and life insurance; and they want safety with a fix rate of return. They are not very much inclined towards differentiation in share mutual fund and debenture. Only few investors invest in share market, those whose capacity of risk tolerance is very high.

The investors should be aware of the various hedging and speculation strategies, which can be used for reducing their risk. Awareness about the various investment options and market volatility can help investors to reduce risk and to increase their profitability.

## LIMITATION OF THE STUDY

There are some limitations under the study:

- The area of research is limited only from Hanumangarh city.
- The study has been conducted under a specific time so it may not give us a perfect picture of whole market.
- Due to some ignorance factor some respondent may not give us full information.
- Some of the respondent may not disclose their portfolio of investment.
- Detailed and depth research is not possible due to financial factors.

## SCOPE FOR FURTHER RESEARCH

The study includes investor's thoughts and the investment options. The project will provide as the better platform to understand the various aspects of investment option. Although the study focuses on variety of investment options but still due to advent of new financial instruments some of them have also to be covered.

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### ABSTRACT

Employers today face a different labor market than in the past, and they are finding it difficult to get and keep high-potential employees and top performers. Best innovative practices for talent management in today's rapidly changing workplace support a larger, more strategic role for HR. Understanding and influencing employees is critical to the success of an organization. Not only reviewing talent, aligning individual goals to business strategies, rewarding top talent is important but also motivating and retaining are key steps. HR leaders can provide the strategic insight, workforce planning to attract and retain the best talent and stay ahead of the competition. Some of the issues faced by the corporate were not providing feedback, not making time for the teams, being too "hands-off", being too friendly, failing to define goals, misunderstanding motivation, hurrying recruitment, not walking the walk. In this research paper, we will be discussing about a number of resources and innovative practical techniques for maintaining good working relationships and working with others efficiently and harmoniously. We will also discuss the tools and techniques that are instrumental for effective communication, motivating employees, conflict resolution and how to deal with potentially unproductive situations and co-workers. Some other innovative ways of managing and dealing with employees are also discussed in detail.

### KEYWORDS

people management, challenges, issues, corporate, innovative managing employee.

### INTRODUCTION

Many people become managers because they are good at their jobs. However, as Gerard M. Blair, author of "Starting to Manage: The Essential Skills," said, "the human factor is crucial to success." A manager has the power to encourage, motivate, and inspire innovation, hard work and dedication. In contrast, they also have the power to crush workplace morale, hinder career advances and promote laziness. A good manager should know how to balance reward with discipline.

With some employees, it isn't a matter of ability, it's a matter of attitude. And while you can't control someone's horrible personality, you can decide how you're going to respond. Use these scripts and strategies to confront problem employees and effectively manage employee discipline so you can bring motivating back to the forefront of your workday.

Probably the most important task a manager will face when dealing with the people under his direction is that of bringing out the best in them. Unlocking people potential is often seen as the key to any business's success. When an employee's talents are not channeled correctly, their behavior can seriously compromise the success of an organization. Some of the roles that an employee who is not being used to his potential can take on are as follows: procrastinator, gossip, manipulator, backstabber, narcissist, black hole, stonewalled, bully, and predator.

People management can be defined as "the process of controlling and monitoring individuals".

The concept of people management is widely used in organizations where the manager's most important task is to manage people. In order to increase the efficiency of the people the manager has to lead, motivate and inspire people. Sometimes rules are defined to manage people like time lines, duties etc. In order to manage the people Human Resource Departments are established in the organizations. These departments are specifically responsible to deal with people of organization.

There are many kinds of people management. Supervisors will take different stances of leadership, like being an autocratic manager, a paternal manager or a democratic manager. People management is essentially making sure that all people within an organization are able to coordinate themselves effectively and work to a high standard. People management is the higher part of an organization that ensures that work is being done correctly and to a consistently high standard.

The first rule of people management is not to let one bad apple spoil your whole bunch. Difficult people can put a strain on the productive members of your team. When managing the people within an organization, a manager must focus on both hiring the right people and then getting the most out of these people. New personnel must provide the organization with the best talent available that meets the needs of the business. The organization must look ahead to how a new employee can be used to their fullest. Getting the most out of an employee means a business has consistent policies and practices in place to provide its people with appropriate training and development. Employees are involved as "partners" in the business.

FIGURE 1



People management practices are most effective when used in combinations which mutually reinforce one another. There is increasing evidence that if people management practices are used in bundles, they yield superior performance outcomes. It is therefore useful to think of each of the areas covered in this unit not in isolation, but as a part of an integrated approach to people management. What do we mean by 'bundles'? Put simply, bundles are collections of people management practices that are consistent with one another. To be effective, practices must be combined in consistent ways; the different aspects of people management in an organization reinforce one another. Virtually all this literature has focused on 'bundles' of people management practices and examined links

between such bundles and a range of performance measures; we should accept that the balance of the evidence supports the claim that effective people management is likely to contribute to organizational performance.

**OBJECTIVES**

1. To achieve through the results of others.
2. To win followers
3. To build personal leadership.
4. To build the habit of setting short term goals to achieve long term goals.
5. To build positive working relationships.
6. To build effective team and processes.
7. To celebrate success of team performance.

**BASIC MODELS RELATING TO PEOPLE MANAGEMENT**

Motivation is a theoretical construct used to explain behavior. It represents the reasons for people's actions, desires, and needs. Motivation can also be defined as one's direction to behavior or what causes a person to want to repeat a behavior and vice versa. A motive is what prompts the person to act in a certain way or at least develop an inclination for specific behavior. According to Maehr and Meyer, "Motivation is a word that is part of the popular culture as few other psychological concepts are"

**CONTENT THEORIES**

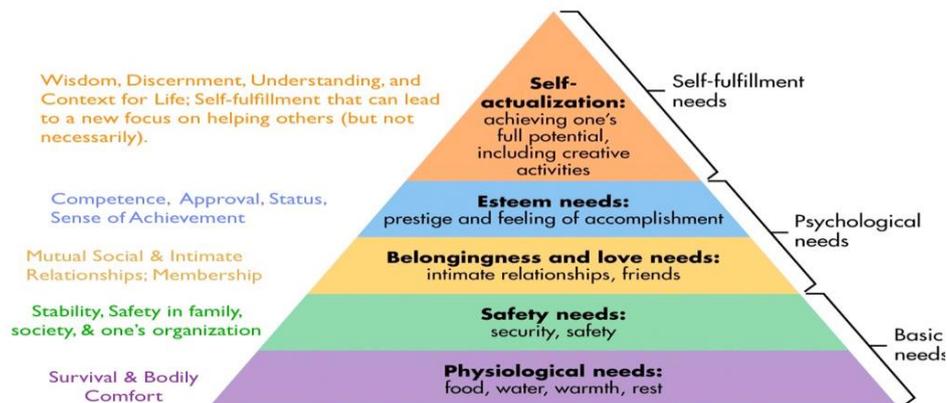
The content theory was one of the earliest theories of motivation. Content theories can also be referred to needs theories, because the theory focuses on the importance of what motivates us (needs). In other words, they try to identify what our "needs" are and how they relate to motivation to fulfill those needs. Another definition could be defined by Pritchard and Ashwood, is the process used to allocate energy to maximize the satisfaction of needs. Content theory of human motivation includes both Abraham Maslow's hierarchy of needs and Herzberg's two-factor theory. Maslow's theory is one of the most widely discussed theories of motivation.

**MASLOW'S HIERARCHY OF NEEDS**

Abraham Maslow believed that man is inherently good and argued that individuals possess a constantly growing inner drive that has great potential. The needs hierarchy system, devised by Maslow (1954), which is a commonly used scheme for classifying human motive. The American motivation psychologist Abraham H. Maslow developed the hierarchy of needs consisting of five hierarchic classes.

FIGURE 2

**Maslow's Hierarchy of Needs**



According to Maslow, people are motivated by unsatisfied needs. The needs, listed from basic (lowest-earliest) to most complex (highest-latest) are as follows:

- Physiology (hunger, thirst, sleep, etc)
- Safety/Security/Shelter/Health
- Social/Love/Friendship
- Self-esteem/Recognition/Achievement
- Self actualization/achievement of full potential/can never be fully accomplished

The basic requirements build upon the first step in the pyramid: physiology. If there are deficits on this level, all behavior will be oriented to satisfy this deficit. Essentially, if you have not slept or eaten adequately, you won't be interested in your self-esteem desires. Subsequently we have the second level, which awakens a need for security. After securing those two levels, the motives shift to the social sphere, the third level. Psychological requirements comprise the fourth level, while the top of the hierarchy consists of self-realization and self-actualization.

Maslow's hierarchy of needs theory can be summarized as follows:

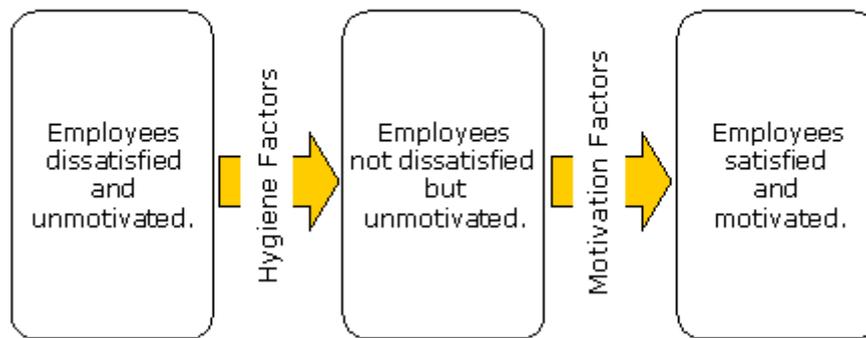
- Human beings have wants and desires which influence their behavior. Only unsatisfied needs influence behavior, satisfied needs do not.
- Needs are arranged in order of importance to human life, from the basic to the complex.
- The person advances to the next level of needs only after the lower level need is at least minimally satisfied.
- The further the progress up the hierarchy, the more individuality, humanness and psychological health a person will show.

**HERZBERG'S TWO-FACTOR THEORY**

Frederick Herzberg's two-factor theory concludes that certain factors in the workplace result in job satisfaction, but if absent, they don't lead to dissatisfaction but no satisfaction. The factors that motivate people can change over their lifetime, but "respect for me as a person" is one of the top motivating factors at any stage of life.

FIGURE 3

### Two Factor Theory - Herzberg



He distinguished between:

- Motivators (e.g. challenging work, recognition, responsibility) which give positive satisfaction, and
- Hygiene factors (e.g. status, job security, salary and fringe benefits) that do not motivate if present, but, if absent, result in de-motivation.

Herzberg concluded that job satisfaction and dissatisfaction were the products of two separate factors: motivating factors (satisfiers) and hygiene factors (non-satisfiers). Some motivating factors (satisfiers) were: Achievement, recognition, work itself, responsibility, advancement, and growth. Some hygiene factors (non-satisfiers) were: company policy, supervision, working conditions, interpersonal relations, salary, status, job security, and personal life.

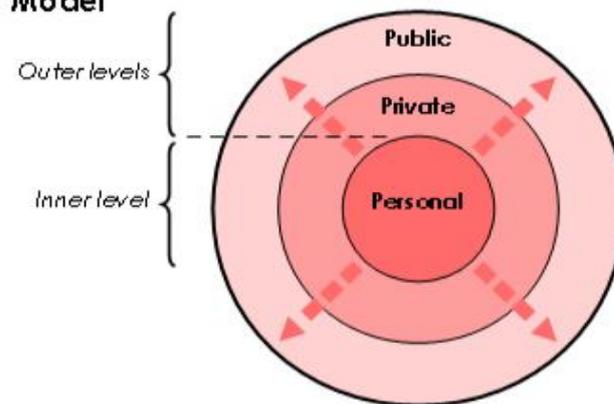
The name hygiene factor is used because, like hygiene, the presence will not improve health, but absence can cause health deterioration. Herzberg's theory has found application in such occupational fields as information systems and in studies of user satisfaction such as computer user satisfaction.

#### THREE LEVELS OF LEADERSHIP MODEL

The model is intended as a practical tool for developing leaders' leadership presence, knowhow and skill. It aims to summarize what leaders have to do, not only to bring leadership to their group or organization, but also to develop themselves technically and psychologically as leaders.

FIGURE 4

### James Scouller's Three Levels of Leadership (3P) Model



The three levels referred to in the model's name are Public, Private and Personal leadership. The model is usually presented in diagram form as three concentric circles and four outwardly-directed arrows, with personal leadership in the center.

The first two levels – **public and private leadership** – are “outer” or “behavioral” levels. Scouller distinguished between the behaviors involved in influencing two or more people simultaneously (what he called “public leadership”) from the behavior needed to select and influence individuals one to one (which he called private leadership). He listed 34 distinct “public leadership” behaviors and a further 14 “private leadership” behaviors.

The third level – **personal leadership** – is an “inner” level and concerns a person's leadership presence, knowhow, skills, beliefs, emotions and unconscious habits. “At its heart is the leader's self-awareness, his progress toward self-mastery and technical competence, and his sense of connection with those around him. It's the inner core, the source, of a leader's outer leadership effectiveness.” (Scouller, 2011).

The idea is that if leaders want to be effective they must work on all three levels in parallel. The two outer levels - public and private leadership are what the leader must do behaviorally with individuals or groups to address the “four dimensions of leadership” (Scouller 2011). These are:

A shared, motivating group purpose or vision.

- Action, progress and results.
- Collective unity or team spirit.
- Individual selection and motivation.

The inner level – personal leadership refers to what leaders should do to grow their leadership presence, knowhow and skill. It has three aspects:

- Developing one's technical knowhow and skill.
- Cultivating the right attitude toward other people.
- Working on psychological self-mastery.

Scouller argued that self-mastery is the key to growing one's leadership presence, building trusting relationships with followers and enabling behavioral flexibility as circumstances change, while staying connected to one's core values (that is, while remaining authentic). To support leaders' development, he

introduced a new model of the human psyche and outlined the principles and techniques of self-mastery. The assumption in this model is that personal leadership is the most powerful of the three levels. Scouller likened its effect to dropping a pebble in a pond and seeing the ripples spreading out from the center – hence the four arrows pointing outward in the diagram.

"The pebble represents inner, personal leadership and the ripples the two outer levels. Helpful inner change and growth will affect outer leadership positively. Negative inner change will cause the opposite." (Scouller 2011).

### MANAGING PEOPLE INVOLVES FIVE BASIC FUNCTIONS

- ✦ Identifying the kind of people you want is a strategic analysis of what your organization is trying to do, analyzing the jobs involved and the skills required.
- ✦ Generating the right workforce means developing the existing staff, recruiting appropriate new people, losing the staff who you do not want and ensuring that essential stay with the organization.
- ✦ Establishing a productive environment means that you work to create the right culture, you operate in an ethical manner, you organize a workplace which is safe and healthy and you adapt working conditions to individual requirements.
- ✦ Getting the work done effectively requires motivating and challenging the employees, defining clearly what needs doing, empowering staff.
- ✦ Improving the performance involves understanding how people management can affect performance positively.

### CHALLENGES AND ISSUES OF PEOPLE MANAGEMENT

#### 1. NOT PROVIDING FEEDBACK

When managers don't provide prompt feedback to his team members, he is depriving them the opportunity to improve their performance. Hence giving regular feedback would definitely gain in-depth of understanding.

#### 2. NOT MAKING TIME FOR TEAM

In many a times, manager is so loaded with work and responsibility, that he has little or no time for his team. And so they need to prioritize blocking out time in their schedule.

Once in leadership or management role, the "TEAM" should always come first. They also need to develop the skill of "LISTENING" actively to their team. As a manager, they need to spend more time in analyzing the needs of the team.

#### 3. BEING TOO FRIENDLY

Today's managers want to be seen as friendly and approachable to their team members. It is always noted that people perform better and are happier working only with whom they get on with. And so many a times' managers need to take tough decisions and set clear boundaries. They need to balance their role as a manager, mentor and a friend.

#### 4. MISUNDERSTANDING THE ROLE

The role moves from peer to leader. This leads, the manager not doing what he is hired to do instead working effectively on the skill set of leading and managing people.

#### 5. NOT DELEGATING

As a manager, he needs to delegate the work to his team and give them the opportunity to perform better. By doing this he not only develops his team members, but also will prepare them to take the pressure off from him.

#### 6. RETAINING HIGH PERFORMANCE GOOD EMPLOYEES

One of the biggest challenges of today's manager is retaining the best employee. For this the manager needs to know his team members better, and keep him motivated and should match up with their expectations.

#### 7. NOT "WALKING THE WALK"

A leader should focus on leading by example in all aspects of their work. Be a role model for your colleagues and your team by exceeding a positive presence. Show compassion, understanding and respect, while focusing your tasks to be inclusive of team work and dedication. It is important that managers and supervisors exhibit the best possible values inside of the work place.

#### 8. BUILDING GOOD LEADERSHIP STYLES

The top issue for 2015 will be leadership. In a recent world economic forum survey of global thought leaders, 86% of them said they have leadership crisis. The only sustainable competitive advantage is people. Smart leaders are finding out new ways to tap that huge pool of talent.

#### 9. FAILING TO DEFINE GOALS

The managers need to set SMART goals.

They need to be consistent. Communication should be clear and should make goals unambiguously. Listen and provide frequent feedback especially when positive. They need to remove the obstacles for their team's success. We need to use principles from management by objectives to align your team's goals to the mission of the organization.

#### 10. MISUNDERSTANDING MOTIVATION

Many a times, the managers tend to assume that team is working only for monetary rewards. However, it may not be true always. As people are unique and so is their motivating factor.

#### 11. HURRYING RECRUITMENT

Getting the right people at right time for the right job becomes crucial.

Whenever team has lots of workloads, filling the vacant role too quickly can be a disastrous mistake. Recruiting wrong people for team is one of the biggest blunders one can make. And hence care has to be taken in choosing the right person with good skill set and attitude.

#### 12. BEING TOO "HANDS OFF"

Many managers fail to strike the right balance. In order to avoid micro management, they fail to monitor set goals. The deadlines should be specified. They need to balance right, that is when to set them free and when to monitor. Only then the short term goals can be accomplished. Day-to-day whereabouts of the team should be noted and necessary feedbacks should be given at appropriate times.

#### 13. FAIL TO COMMUNICATE NEGATIVE FEEDBACK

As a manager, communicating feedback to the team becomes important. However managers often fail to communicate negative feedbacks to their teams. Managers should inculcate skills of effectively communicating negative feedbacks in such a way, that the team members should not be demotivated and instead they should develop a positive spirit and work on their negative aspects.

#### 14. MANAGING INTERPERSONAL CONFLICT IN THE TEAM

Successful leaders /managers are dependable on their abilities to deal and manage interpretations, conflicts and stress. However managers need effective communication and should be able to deal with conflict resolution. They should be able to deal with potentially unproductive situations and co-workers in a team.

#### 15. DEALING WITH EMPLOYEES WHO LACK BASIC SKILLS

Identification of the employees lacking basic skills, need to be recognized. The managers need to arrange for the training programmes.

These training programmes should not only enhance the employee's skills, but also train them to accept more responsibility.

### FEW OTHER CHALLENGES TO SPECIFY ARE AS PER FOLLOWING

\* Managing people of a different generation.

\* Dealing with employees showing bad attitude.

- \* Insufficient authority and discretion to reward.
- \* Managing people in remote locations.
- \* Managing people with language gap.
- \* Managing employees with unreasonable expectations and demands.

## PROCESS TO BE FOLLOWED FOR EFFECTIVE PEOPLE MANAGEMENT

The following are the steps which can be considered to outline the process of goal setting and managing people:

### STEP 1

#### IDENTIFYING THE REQUISITES REQUIRED FOR THE ROLE CHANGE AS AN MANAGER

As a manager, you are going to be responsible for the work of others; your success depends on how well your team performs. You are now responsible for far, far more work than you could ever possibly produce by yourself. Hence the focus now changes from individual performance to team performance.

### STEP 2

#### PREPARING FOR THE TRANSITION

The below, lists a few things that the manger needs to prepare for himself before deep driving to his role. The main job of the manager is to find a mentor. Not your immediate manager, but find another manager with lots of experience and ask that person to help you transition. This is a very important and often overlooked tool. It will also gain you considerable esteem in the eyes of the upper level management team. It shows maturity.

### STEP 3

#### SETTING UP OF SMART GOALS

This is one of the critical role of setting up of short term goals to achieve long term goals. Periodic reviewing of the goals accomplished becomes important. The manager needs to set the deadlines for the short term goals. He needs to set new goals such as reviewing productivity. The manager can have hourly, daily or weekly targets that the team must meet. A checklist can be made, by writing down everything and posting it prominently. Even minute of details have to be taken care of. A word of caution here, this list will change over time; it is a living document. Some things may stay the same (service levels, policies for example) but other things may change depending on the strategies handed down to you from the top management. The manager needs to review the list as frequently as possible, with a critical eye, and revise it when necessary.

### STEP 4

#### KNOWING YOUR TEAM

The current trend in the organizations is not only knowing each team member professionally but also at a personal level. The manager should have the capability of identifying the strengths and weaknesses of each team member. One may work extremely fast but occasionally misses some of the details. Another is incredibly thorough but has issues with the volume of work processed. Few others may have spectacular customer relationships but can never say "no" to the clients whereas many may have excellent technical skills but falls short in people skills. As a manager, he needs to really need to know all this very, very well. He may use this knowledge to balance the productivity of your team.

### STEP 5

#### MATCHING TASKS WITH TEAM MEMBERS

This step highlights the matching of the skill sets of the team members to their tasks. The information gathered from the above steps can be used to match people with work. This is termed skill-based work assignment.

The manager needs to assign tasks such that each member's strengths are optimally used and minimize work assignments that would target his or her weaknesses. Whenever an opportunity is found the manger needs to, put people together that have complimentary skill sets.

### STEP 6

#### MEET WITH YOUR TEAM MEMBERS

Regular one-on-one meetings are critical for a manager for good management.

These meetings have several purposes like mentioned below:

- Give feedback on job performance:
- Outline the goals for the next meeting:
- Learn about staff issues:
- Ask for ideas:
- Motivation:

### STEP 7

#### BE VISIBLE

The manager must not isolate himself from the team. Sometimes the initial workload will seem overwhelming and might have a tendency to sequester away from the staff to keep up – especially with the new paperwork load he may have. Absolutely must not give the appearance of being an "ivory tower" inhabitant. If your team members don't see their leader, they'll develop an attitude of anarchy. Things will go very badly for you. Even if you're managing remote staff, you need to make sure they "feel" your presence. If you manage multiple shifts, make sure you visit all shifts regularly.

### STEP 8

#### DOCUMENT TEAM ACTIVITIES

The manager's personal performance review will focus largely on your team's performance so should make sure to keep a written record of issues and accomplishments. This will be especially important if there are significant issues that arise. Problems are expected; how the manager and team handles those problems must be a focus of the efforts.

### STEP 9

#### REWARD PERFORMANCE

This doesn't mean money, although money is nice; it's not a primary motivator for on-the-job performance. Recognition is much more effective. If you have the authority, perhaps grant performance leave (an extra day off for doing something exceptional). Make the rewards regular and make them attainable but difficult. When you give a reward, make it well known (reward publicly, admonish privately).

### STEP 10

#### LEARN COACHING

There will inevitably be times when the manager needs to correct the behavior of the employees. The manager needs to learn to do this properly. If he does it correctly, he will get the results he wants otherwise, things can go horribly wrong.

## HOW TO IMPROVE PEOPLE MANAGEMENT

### • FLEXIBLE LEADERSHIP

The goal is to be authoritative, but not authoritarian. A manager should know how to be flexible with others, while maintaining control of the situation. He needs to be flexible, open up to the team for all kinds of possibilities and new ideas. It also encourages staff to be frank and open with their boss.

### • PROBLEM SOLVING

Instead of calling an employee lazy or hot tempered, we need to, identify the root causes of their behavior. If the employee is constantly late because of a health problem, for example, then the manager can suggest the employee seek medical assistance, or help connect him with a company-subsidized medical program, if such program exists.

"Each person is different, each situation is different, so each solution must be carefully crafted."

- **RECOGNITION AND MOTIVATION**

A manager can have a profound effect on her staff. The simple act of recognizing someone's talent can provide intense motivation for that individual and the rest of the team. It's important to acknowledge achievements and reward those who go the extra mile. Employees are constantly seeking pay raises, and a manager's job is to equate that goal with improved skills, experience and hard work.

- **PEOPLE EMPOWERMENT**

People Empowerment can be a very effective tool within the field of people management. This technique can be used to involve employees in any improvement program within an organization. Authority, accountability, and responsibility are delegated to the employees for improving the processes which are under their control without first having to obtain permission from management before making changes. This can be successful only when employees are recognized, congratulated, and rewarded for their commitment to problem solving.

## **INNOVATIVE WAYS OF PEOPLE MANAGEMENT**

### **1. COMPLIMENT YOUR STAFF**

Little things go a long way. Appreciating someone that they are doing a good job really really does make a huge difference. However the manager need not do it so often as it becomes meaningless.

### **2. COMMUNICATE, COMMUNICATE AND COMMUNICATE**

The staff will feel much more engaged if you let them know what's happening. Everybody wants to see the "Big picture" sometimes.

### **3. BE FAIR, BUT FIRM**

There will be a time when you need to consider disciplinary action up to and including dismissal. This can be incredibly difficult even for experienced managers. How to discipline employees without hurting their ego state is a huge challenge. However the managers need to be consistent and has to document everything.

### **4. BECOME FAMILIAR WITH EAP: (EAP – EMPLOYEE ASSISTANCE PROGRAM)**

Most of the companies have started of with "Employee Assistance Program", which can be incredibly useful. Whenever an employee has an personal or professional issue, you can refer them EAP. This is one of the most innovative step taken by the organizations for employee assistance.

### **5. HIRE A COACH**

In addition to a mentor, hire a coach if possible. A mentor can be a great help, but may not always have time to devote. A coach is a trained professional with no agenda to pursue and hence would help you in guiding and developing an authentic style of management.

### **6. NEW STYLE OF MANAGEMENT**

We see new leadership styles emerging with an emphasis on loose structure, rapid responses, self-organizing teams and broad based collaboration.

### **7. CONNECT WITH NOT ONLY EMPLOYEE BUT ALSO WITH HIS FAMILY**

Many a times, managers fail to consider the personal side of the employee. They need to spend time knowing the employee and his family members. Whenever any company celebrates, they need to invite with their family and find an opportunity to know more about them. This would help the employees to stay loyal to the company. Whenever need arises, you can also involve the family members to participate. This would definitely motivate the employees.

## **OTHER INNOVATIVE WAYS OF MANAGING AND DEALING WITH EMPLOYEES INCLUDE**

- Interactive dashboards that let HR rank talent based on potential and performance and incorporate both formal data (such as performance reviews) and informal data (such as peer kudos)
- At the best workplaces, managers share the personal side of information such as emotional reactions to news, personal takes on values, or simply their hobbies and interests
- Embedded and predictive analytics to identify at-risk top performers so that managers can intervene before valuable talent is lost
- Spending enough of time with employees on career development.
- Good organizational support, by empowering employees to take decisions.
- Open door policy, to come up with innovative ways of dealing things.
- Applying informal, personal and meaningful connections with the employees.
- Comprehensive learning solutions that map to the needs of individual employees and organizational goals

## **CONCLUSION**

Understanding and influencing employees is critical to the success of an organization. In 2015, one of the main challenge is leadership crisis. Not only reviewing talent, aligning individual goals to business strategies, rewarding top talent is important but also directing, motivating and retaining are key steps. Managers need to be effective leaders who can provide the strategic insight, workforce planning to attract and retain the best talent and stay ahead of the competition.

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## EFFECTS OF ORGANIZATIONAL POLITICS ON EMPLOYEE PERFORMANCE AT CONTAINER FREIGHT STATIONS (CFS) IN MOMBASA COUNTY

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### ABSTRACT

*Organizational politics have been a major concern in the contemporary business world. As organizations face each other (competitors) in the ever-competitive market(s), there have been untold levels of inter-organizational political play, and this has spread to intra-organizational politics. The intra-organizational political challenge has been in existence since time immemorial since interests have always been a dividing factor even among people from the same parents. Consequently, organizational politics have been rampant at the international, regional, national, as well as local levels, as has been highlighted in this proposal. Organizational politics have had immeasurable impacts on the workplace environment, but they have worsened with the increase in favouritism from diverse quarters including race, ethnicity, age, class, gender, education, and political affiliations among others.*

### KEYWORDS

career development, competitive advantage, employee retention, training.

### JEL CODE

J23 employment determination, job creation, demand for labor; self-employment.

### 1.0 INTRODUCTION

Organizational politics is as an activity that permits people in organization to accomplish goals without going through proper channels. Whether political activities assist or harm the organization depends on whether the goals of individuals are consistent with the goals of organization. There has no doubt that political beliefs are an ordinary observable fact in every organization. Organizational politics represented devious behaviour of employees towards their work environment only for their self-interests. These self-interests may be at the cost of other employees or may be organizational goals as well. Organizational politics is the part of the social fabric of any organization. Power, influence and politics have at least some effect on every member of an organization and thus on the entire organizational unit.

Perceptions of Organizational politics are very important aspect of Organizational life with respect to its members as these influence various processes which ultimately affect performance of employees. Since the 1990s, perceptions of organizational politics (POPs) have been extensively studied and have emerged as a good predictor of job outcomes and job performance (Kacmar, Bozeman, Carlson, & Anthony, 1999; Valle & Perrewé, 2000; Vigoda-Gadot, 2003; Vigoda-Gadot & Drory, 2006). Organizational politics is an elusive type of power relationship in the workplace. It represents a unique domain of interpersonal relations, characterized by the direct or indirect (active or passive) engagement of people in influence tactics and power struggles. These activities are frequently aimed at securing or maximizing personal interests or, alternatively, avoiding negative outcomes within the organization (Ferris et al., 2002). However, they may also be targeted at securing or maximizing collective interests (team, group, organizational, or social) in cases where several decisions are possible that affect different interests. Organizations are social entities that involve a struggle for resources, personal conflicts, and a variety of influence tactics executed by individuals and groups to obtain benefits and goals in different ways (Molm, 1997). Estimating the political climate of a work unit is a complex task but it is crucial for a better understanding of organizations. OP is usually defined as behavior strategically designed to maximize self-interests (Ferris, Russ, & Fandt, 1989) and therefore contradicts the collective organizational goals or the interests of other individuals.

### 2.0 LITERATURE REVIEW

To develop a thorough understanding of the conceptual constructs and empirical research for the present study, extensive review of literature was undertaken. This has not only helped in identification of the gaps in the existing body of knowledge but has also enabled to establish a relationship of the present study with what already exists.

#### 2.1 MOMBASA COUNTY

Mombasa County, is the smallest county in the coast province of Kenya, covering an area of 229.7 Km<sup>2</sup> excluding 65 Km<sup>2</sup> of water mass. Administratively, the county is segregated into seven divisions, eighteen locations and thirty sub-location and hosts six constituencies namely Mvita, Changanwe, Jomvu Kuu, Likoni, Kisauni and Nyali. Population distribution and settlement patterns in the county are influenced by proximity to roads, water and electricity facilities. The population is also concentrated in areas where there is availability and accessibility to employment opportunities, affordable housing, and security. The key sectors in Mombasa County include port, fishing, tourism and manufacturing.

#### 2.2 OVERVIEW OF ORGANIZATION POLITICS IN CONTAINER FREIGHT STATIONS IN MOMBASA COUNTY

Container Freight Stations (CFSs) are facilities where freight shipments are consolidated or de-consolidated and staged between transport legs. A CFS is typically located in proximity to an ocean, port, or airport, where cargo containers are transported to and from. The year 2000 saw the establishment of the initial CFSs set within the Kenyan port. The objective was to help in handling decongestion of LCL (less-than-container-load) cargo with the ultimate vision of decongestion Mombasa Port. The rise in the demand for more space because of rising cargo landing at Mombasa port created the need of increasing the port's capacity via integrating the prevailing private sector capacity. Presently, the location of the existing CFSs in Mombasa town fall within a ten kilometers radius of the port, as spelt out in their establishment customs requirement.

Primarily, their license allows them to handle LCL and vehicle cargo, which has proven as a crucial reprieve for Mombasa port in reference to space. Presently, Mombasa town has seventeen licensed CFSs, with seven among these being KPA nominees to handle containers; these are Mombasa Island Cargo Terminal, Consolbase CFS, Makupa Transit Terminal to mention but a few. The others (such as Grain Bulk Handlers Ltd, Portside Freight Terminals Ltd, and Regional Logistics Centres) handle containerized merchandise, vehicles, grain, and other bulk/special loads (Kenya Shippers Council, 2011).

CFSs operating in Mombasa are one imperative area where politics have been hampering the growth to an extent of consulting industrial court actions. With seventeen different CFSs, there have been countless conflicts with the Kenya Ports Authority as the regulating body mainly because of disobedience in abiding to

the due processes and abuse of powers. The main notable hindrance to the control or elimination of such conflicts is the attachment to political interests in the nation, a factor that has been affecting many institutions in the country. This has contributed to the abuse of powers such as contravention or evading the necessary tariffs and irregularly levying charges for the benefit of specific individuals.

### 3.0 IMPORTANCE OF THE STUDY

The study will help in establishing the effects of organizational politics (OP) on employee performance in Container Freight Terminals (CFS) in Mombasa County and hence provide suggestions on sustainable applicable practices on the topical issue. The CFS's in Kenya play a key role in the business growth of the maritime industry which contributes a substantial amount to the growth of the economy of the country.

### 4.0 STATEMENT OF THE PROBLEM

This study endeavours at relating organizational politics and how it relates to employees performance since 'politics stems from a diversity of interests, and those competing interests must be resolved in some way' (Bauer and Erdogan 2010). The study also tries to highlight how office politics can be used for the mutual benefit of the organization since, without political awareness and skill, we face the inevitable prospect of becoming immersed in bureaucratic infighting, parochial politics and destructive power struggles, which greatly retard organizational initiative, innovation, morale, and performance. In literature, employees revealing dysfunctional outcomes for individuals, groups or organizations have construed organizational politics in negative terms. Thus, organizational politics affect the employees' performance in noticeable ways. This paper aims at unearthing the manner in which organizational politics relates with friendship among employees, employees' job satisfaction, employees commitment to the organization, employees job involvement, and the employees' turnover intentions. Majority of the scholars have focused on the negative aspects of organizational politics, seeing it as representative of the dark side of human conduct, while there have been minimal effort to illustrate the role played by the same organizations in the wellbeing of the organization. In this regards, organizational politics has been considered almost synonymous with manipulation, coercive influence tactics, and other subversive and semi-legal actions. The relationship between organizational politics and organizational relationships and performance versus the outcomes is important because it has both theoretical and practical implications. It can potentially help in creating a better understanding of the meaning of organizational conflict, power, and influence tactics and posit hypotheses regarding their meaning for micro- and macro-level organizational outcomes. Furthermore, it can point to practical tools for handling workplace politics and minimizing its negative effect on members, teams, and the organization as a whole.

### 5.0 OBJECTIVES

Human beings are political by nature and organizations, as well are full of politics emanating from the diverse interests held by their stakeholders. Organizations need to create an efficient and loyal workforce that is motivated to perform. political behaviour in an organization could be desirable or undesirable and Armstrong (2012) goes further to indicate that organizations consist of individuals who, while they are ostensibly there to achieve a common purpose will, at the same time, be driven by their own needs to achieve their own goals. Loyal, efficient and stable staffs are argued to be one of the key to competitive success (Porter, 1990).

Organizational politics is a global characteristic in organizations and even some of the most successful companies have been hampered by this challenge in notable circumstances. Established and well-known organizations have been affected by this major source of distract in modern business, whose major cause is individuals trying to promote their personal agenda as opposed to the organization's objectives. In particular human resource personnel in the CFSs have to deal with the following factors: (i) gossip (ii) hierarchical persuasion (iii) employee manipulation. (Silbert, 2005). Therefore the research sought to find out the effects of organizational politics in employee performance in CFSs in Mombasa County.

### 6.0 HYPOTHESES

The container freight stations in Mombasa County are part of the wider transport industry in Kenya. The transport and infrastructure industry in Kenya has experienced massive attention in terms of funding for development in the past five years due to inter-state development projects. This industry forms the backbone of all economic development focus in Kenya. It is therefore crucial to investigate how organizational politics affect employee performance in the CFSs in Mombasa County.

### 7.0 METHODOLOGY

The study utilized a desktop research technique in seeking facts, general information on the topic, historical background and study results that have been published or exist in public documents. The information was obtained from libraries, newspaper archives and websites, journals and magazines published by various CFSs. A comprehensive review of existing literature i.e., Journals, Books, Magazines, Internet and Newspapers was undertaken to know the contemporary organizational politics scenario in the CFSs and the research undertaken in the field so far. It enabled identification of the prevalent gaps for the study.

## 8.0 RESULTS AND DISCUSSION

### 8.1 GENERAL POLITICAL BEHAVIOUR

This dimension consists of the behaviour of the employees acting politically. It explains employees' self-serving way to attain valued outcomes. These political activities specifically grow under the few situations.

#### A. NON-AVAILABILITY OF RULES

It described when there is no guidance in form of rules and regulations provided to the employees by the organization, they develop their own. Employees develop such policies that provide their own self benefits (Kacmar & Carlson, 1997). In other words, policies only provide benefits to the policy makers.

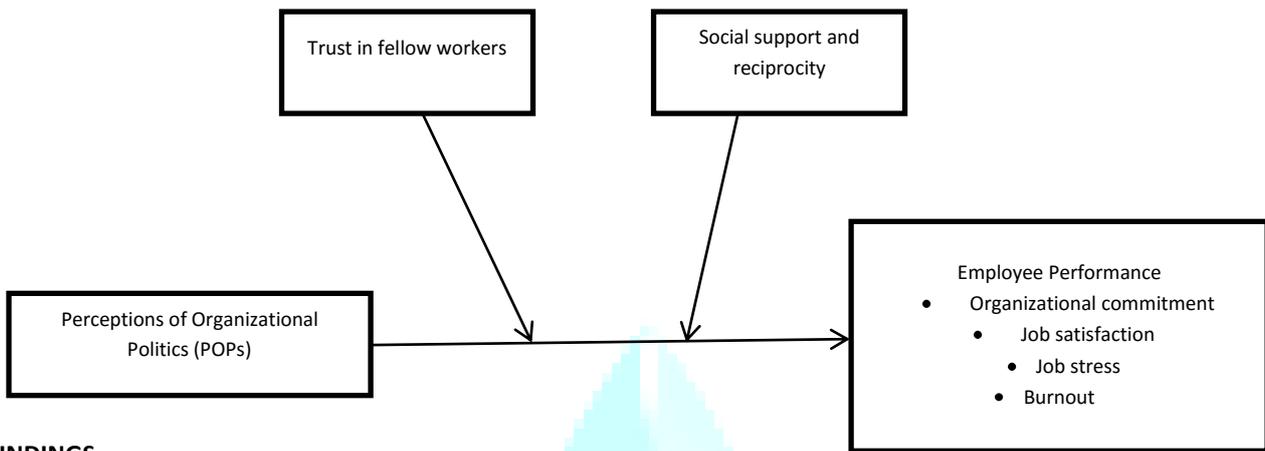
#### B. DECISION MAKING UNDER UNCERTAINTY

It depicted political influence. When decision is based upon incomplete or vague information and decision maker has to exercise his own analysis and interpretation of the existing data. Vague or incomplete information can be interpreted in different ways resulting in decisions which are not effective, that decisions said to be political.

#### C. SCARCITY OF VALUED RESOURCES

It means employees in organization do hard work for valuable resources. These employees involve in clashes and implement different influence strategy to get profits and achieve their objectives in a variety of ways. The desirability and immediate benefit of the resource will direct to the decision to take part in political activities.

FIGURE 1: ORGANIZATIONAL POLITICS & EMPLOYEE PERFORMANCE MODEL

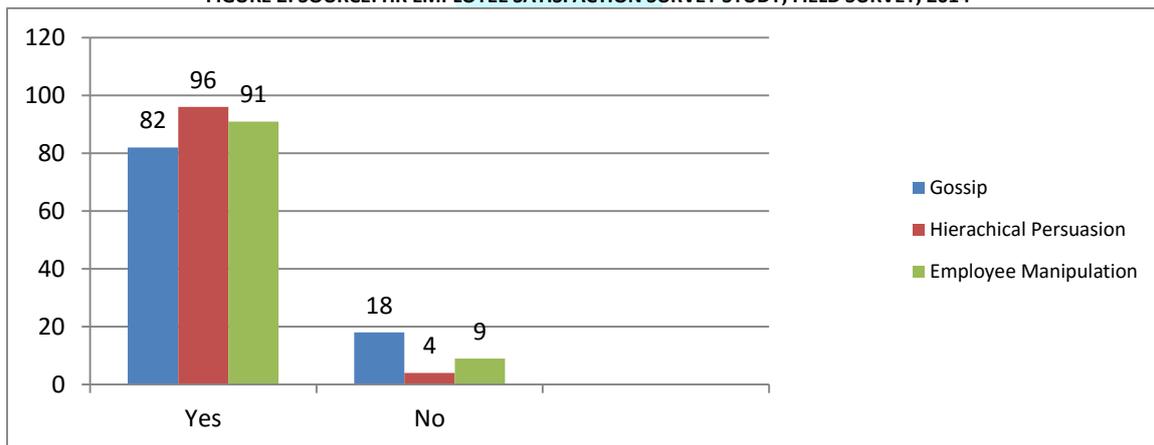


9.0 FINDINGS

9.1 ORGANIZATIONAL POLITICS ASPECTS AND EMPLOYEE PERFORMANCE

From the desktop studies, it was noted that Hierarchical Persuasion had the highest impact on employees’ performance, followed by Employee Manipulation with Gossip ranking the lowest. This is as represented in Figure 2 below:

FIGURE 2: SOURCE: HR EMPLOYEE SATISFACTION SURVEY STUDY; FIELD SURVEY, 2014



It was noted that majority of the employees use upward appeal, which involves appealing to the owner or the business's goals in efforts to change the owner's views or behaviours (Carmeli & Schaubroeck, 2007) thus the high ranking of Hierarchical Persuasion. This shows that higher the level of existence of organizational politics will result in lower level of employee’s performance and vice versa.

It is an important point to be noted that existing literature has shown that by putting employees to work in the environment prevailing organizational politics in it, the level of the employee’s performance tends to decrease. Similarly, majority of the organizations are not considering the existence of organizational politics as a hurdle for improved performance from employees

10.0 RECOMMENDATIONS

Research recommends that the management of the organizations should channelize their human resource towards ensuring that politics in their organizations do not become destructive. Organizations experts like organizational psychologists should be involved to recognize and handle the troubles of their institution. Therefore organizations realize the employees’ needs and work for the betterment of the organization environment. It may also propose that the organization should manage development curriculum periodically for their supervisors to better understand the political environment and enable them to take on time remedial actions. Every member of staff should be involved in the setting of the workplace and management should share success with their staff at lower level. It may also recommend that the organization should exercise the workers for enhancing the loyalty of the organization among workers. Research recommends that the organization motivates the human resources to work hard efficiently and effectively for attaining the higher satisfaction. For this organization must gratify the employees on the attainment of a specific task and should assist the human resources to feel excellent. In this way the employees of the organization psychologically and expressively associate with their institution. Organization must arrange orientations for the new employees, which will help them to learn their job tasks. In future the research can be applied in different sectors with others variables. Furthermore mediation effect of different variables in between perception of organizational politics and employee performance can also be explored in future.

11.0 CONCLUSIONS

Power, influence and politics have at least some effect on every member of an organization and thus on the entire organizational unit. Organizational politics is an elusive type of power relations in the workplace. It represents a unique domain of interpersonal relations, characterized by the direct or indirect (active or passive) engagement of people in influence tactics and power struggles. These activities are frequently aimed at securing or maximizing personal interests or, alternatively, avoiding negative outcomes within the organization. However, they may also be targeted at securing or maximizing collective interests (team, group, organizational, or social) in cases where several decisions are possible that affect different interests.

Employee’s performance can be enhanced by providing them a working environment free of politics in their organizations. Working environment free of politics will not only help the employees to perform better and take decisions freely but it will also help the organizations to grow by achieving its goals and objectives efficiently and effectively. Implication of working environment free of politics in organizations will result in employees feeling their responsibilities towards their actions and placing themselves on the place of stakeholders to ensure for the benefits of all, the better employee’s performance as an outcome by utilizing all their powers.

This research concludes that it is significant in providing the views of HR managers in the CFSs on the key aspect of organizational politics effects; this topical issue is globally and locally important yet relatively under-researched with regard to its contribution to employee performance. Recognising the size and

strength of the container freight stations in the maritime and transport sector and the demand for employee performance, it can be concluded that employers in this sector need to focus developing distinctive and conducive open organizational environment devoid or with limited politics.

## 12.0 LIMITATIONS

There was limitation in getting the relevant information required from the various targeted container freight stations. This non-disclosure can be attributed to the suspicion on the part of the respondents as the data required touches on critical human resource issues. A second limitation is that the data used is for CFSs in Mombasa County, which have small or no established HR departments and HR managers without key strategic roles in HR strategic role formulation. Hence, the findings may not give a true representation of the wider organizational politics and employee performance in CFSs in Kenya.

## 13.0 SCOPE FOR FURTHER RESEARCH

The scope of this study was limited to only the existing CFSs in Mombasa County. The study therefore recommends further research to be done on organizational politics on the CFS and Inland Container Depots in other counties such as Lamu, Nairobi and Eldoret. In addition, the study recommends that further studies also be conducted in other nations having similar CFSs such as Nigeria. This will provide a more detailed comparative analysis of the challenges affecting the container freight sector in the transport industry in the region. Future research might also explore how different categories of employees (e.g. knowledge workers, professionals, labourers) are affected by differing organizational politics set-ups. Additionally, future research could directly seek the views of union representatives for their insights into challenges in managing and leading employees in highly politically charged environments in the organizations.

## 14.0 ACKNOWLEDGEMENT

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**NEED OF MICRO INSURANCE IN INDIAN SCENARIO WITH SPECIAL REFERENCE TO UDUPI DISTRICT**

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**ABSTRACT**

*Indian Insurance Industry has seen a significant growth over the past few years on account of growing national economy, increasing per capita income, growing consumer awareness about insurance products, and the entry of foreign players in the Indian market bringing in more innovative products. The importance of insurance and its awareness is being created and the insurance products are being promoted in urban areas. But whereas when exposed to financial shocks what happens when a poor family's breadwinner dies, when a child in a disadvantaged household is hospitalised, or the home of a vulnerable family is destroyed by fire or natural disaster? Every serious illness, every accident and every natural disaster threatens the very existence of poor people and usually leads to deeper poverty. This study is undertaken to analyse the need of micro insurance and its viability in the city of Udupi. Hence this study provides a detailed analysis on the need of micro insurance and its viability in the Indian Scenario.*

**KEYWORDS**

insurance, micro insurance, social security.

**1. INTRODUCTION****1.1 HISTORY OF INSURANCE IN INDIA**

The insurance industry in India, private and public, has its roots in the 19th century. The British Government set up state-run social protection schemes for its colonial officials, many of which evolved into the schemes that operate to this day. The first private insurance company was the Oriental Life Insurance Company, which started in Calcutta in 1818. The 19th century saw the development of a number of Indian insurance companies including the Bombay Mutual (1871), Oriental (1874) and the Empire of India (1897). Under British rule there were large numbers of insurance companies operating in India. In 1938 the British passed the Insurance Act, a comprehensive piece of legislation governing the insurance industry. The Act remains the legislative cornerstone of the insurance industry to this day. Regulated Indian insurers are divided into two core categories: life and general insurance. Life insurance includes products like endowment policies and retirement annuities. General insurance covers all other types of insurance. In 1956 the Indian Government nationalized the life insurance industry. The reasons given at the time were high levels of fraud in the industry and a desire to spread insurance more widely. As Prime Minister Nehru noted at one time in Parliament, "We require life insurance to spread rapidly all over the country and to bring a measure of security to our people." The Government combined 154 insurance providers and formed the Life Insurance Corporation of India. General insurance remained in private hands until 1973 when it was nationalized.

The impact of nationalization was to create a small number of state-owned insurance companies. Just prior to nationalization, 68 Indian (including the Life Insurance Corporation, LIC) and 45 non-Indian entities sold insurance. All these organizations were absorbed into one giant corporation, the General Insurance Corporation (GIC) with its four subsidiaries: Oriental Insurance Company Limited, New India Assurance Company Limited, National Insurance Company Limited, and United India Insurance Company Limited. At the beginning of 2005 there were 14 life and non-life insurers operating in India.

**1.2 MICRO INSURANCE**

Micro insurance, commonly called as insurance for the poor, has recently drawn the attention of practitioners in developing countries. In common parlance, micro insurance is the provision of insurance services to low-income households, which serves as an important tool to reduce risks for the already vulnerable population. There is no unanimously accepted definition of micro insurance despite its profound use and understanding across stakeholders and others. A simple definition of micro insurance is offered by Churchill (2006) is that it is an insurance that

- (i) operates by risk-pooling
- (ii) financed through regular premiums and
- (iii) tailored to the poor who would otherwise not be able to take out insurance.

Micro insurance is defined as insurance that is accessed by the low-income population, provided by a variety of different entities, but run in accordance with generally accepted insurance practices. Importantly this means that the risk insured under a micro insurance policy is managed based on insurance principles and funded by premiums (International Association of Insurance Supervisors, 2007). Micro insurance is different from usual form of insurance. A macro definition of micro insurance states that it is the provision of financial protection contingent on the occurrence of predefined risk in exchange for an ex-ante premium payment affordable to the clients. In terms of micro definition, micro insurance is more complicated as there are different approaches. —Micro|| as reference to low premium and low benefits may be affordable but it may not be effective enough to manage risks of different types of different categories of clients. Micro insurance is often believed to be an important component of a broader set of financial services under microfinance — making available financial services for poor households and enterprises to sustain their livelihoods. Basically there are two broad categories of micro insurance often commonly understood — one focused on extending social protection to the poor in the absence of appropriate government schemes and the other offering a vital financial service to low-income households by developing an appropriate business model that enables the poor to be a profitable (or sustainable) market segment for commercial or cooperative insurers. Micro insurance is also taken as group insurance that can cover thousands of customers under one contract. It requires an intermediary between the customer and the insurance company. This intermediary role has been played mainly by non-governmental organization (NGO) and micro finance institutions (MFI). The role of intermediaries in growth of micro insurance in India is well documented.

Currently around 135 million, or 5%, of low income people in developing countries are using micro insurance products. But the size of insurance market for low income groups is large and it constitutes about 1.5 to 3 billion potential clients (Micro insurance Centre, 2007). According to a research carried out by Swiss Re in 2007, most growth in the insurance industry over the past decade has come from the wealthy and middle income markets in emerging economies. Premiums grew by 3.3% globally and by 11.8% in the emerging markets in that year. Though partly this was due to a growing number of clients moving into the wealthy and middle income brackets in these countries, it is also attributable to insurance expanding into new markets. The number of people covered under micro insurance is estimated about 78 millions in 77 countries out of 100 less developed countries.

**1.2.1 MICRO INSURANCE IN INDIA**

In India development of micro insurance sector and related policy discussions has started few years back. Within very short period, the sector has drawn attention of policy makers due to its importance both at household level and the economy as a whole. Two major and recent studies by the ILO (2004a and 2004b) depict broad picture of micro insurance sector in India. As regard to the micro insurance products the study highlights that out of 80 listed insurance products 45 cover only a single risk and only two or three products cover multiple risks. Majority of the insurance products cover life (52%) or accident-related risks and addressed to individuals. Out of the 12 currently available health insurance products seven products have been designed and restricted to groups and five products have chosen to coverage to some critical illness at individual level but not the reimbursement of hospitalisation expenses. Most of the products require a single payment of premium (i.e., a one-time payment) upon subscription. Private insurers had three times more products than their public counterparts.

Some important observations about the demand for micro insurance in India are made in a recent study by ILO (2004b). The study provides details of micro-insurance schemes operational in India. Out of 51 schemes that are operational in India most schemes have started operations during the last few years. As regards to beneficiaries, about 43 schemes, for which the information is available, cover 5.2 million people. About 66% of the micro insurance schemes are linked with micro finance services provided by specialized institutions (17 schemes) or non-specialized organizations (17 schemes). Twenty two percent of the schemes are implemented by community based organizations, and 12% by health care providers. Life and health are the two most popular risks for which insurance is demanded. Twenty-five out of 37 schemes received some external funds to initiate their schemes. Twenty out of 32 schemes received external technical assistance in the form of advisory services, technical services, training or even referral services for their schemes. As regard, to the regional distribution of micro insurance outreach about 74 % of total schemes operate in 4 southern states constituting Andhra Pradesh (27%), Tamil Nadu (23%), Karnataka (17%) and Kerala (8%). Two western states Maharashtra (12%) and Gujarat (6%) account for 18% of the schemes. About 56% of schemes deal with one single risk. This shows low outreach and unequal distribution of micro insurance in the country. The study also reflect the linkage between micro-insurance and micro-finance.

Development of micro insurance is often related to micro credit, particularly in developing countries like India. Though micro credit has dominated in micro finance market the entry of micro insurance is only in recent past. In India micro insurance is a relatively new financial service and its outreach is rather limited and unevenly distributed across states. The overall performance of micro insurance in India is not very encouraging. According to a recent study by UNDP (2007), the outreach of micro insurance is around 5 million people covering only 2 percent of the poor in the country. It shows there is huge potential for micro insurance market in the country. A conservative estimation of size of micro insurance market (both life and non life) in India ranges between INR 62,304.70 to 84,267.55 million (US\$ 1,384.55 to 1,872.61 million). In case of life insurance, the market potential is estimated to be between INR15,393 to 20,141 million (US\$ 342.07 to 447.58 million) and in case of non-life insurance, it is between INR46,911.70 to 64,126.55 million (US\$1,042.48 to 1,425.03 million). The non-life insurance estimation is limited to four types of coverage – milch animals, livestock, health and crop insurance. The population used for this estimation is 40-50 percent of those earning less than US\$1 a day and 50-70 percent of those earning between US\$1 – 2 a day. This is expected to increase as demand grows and a wider range of risks are recognized as insurable. However, high exclusion of poor and vulnerable groups from formal insurance cover in India is also evident as per the UNDP study. Social protection measure is often related with micro insurance for the poor and low income groups. Micro insurance can play a crucial role as a comprehensive tool to reduce poverty, inequality and vulnerability, particularly where public social protection measures are inadequate and unevenly distributed. Unfortunately, more than half of the world's total poor do not benefit from any form of social protection measures. Since micro insurance is designed for the protection of low-income people to cope with common risks, it can also strive to cover the excluded such as poor, women and workers in informal sector. In many developing countries like India, the proportion of informal workforce in total workforce is substantial and there is increasing tendency towards casual nature of labour. Under this situation, it becomes daunting task on the part of the government to provide social security to all. About 90 percent of the working population of India is employed in the informal sector and about thirty percent of the unorganized workers are very poor who needs public social security supports. Although current social protection measures consist of health, disability, death, old age and economic risks are prioritized, its funding and implementation remain challenging. In India social protection being a concurrent subject, it has its own political economy. So in the absence of a dependable social protection, the importance of micro insurance becomes interminable. With inherent limitations of the existing social protection measures in the country, there is also a high demand to combat the adverse impacts of natural disasters such as drought, floods, cyclone etc. Unfortunately, the ex-post coping mechanisms primarily supported by the Government are not sufficient and do not cover all groups in all sectors. Though India has exhibited with series of pro-poor anti-poverty measures oriented towards reduction of risks and vulnerability, micro insurance can contribute indirectly as it often exclude covariant risks from their portfolio.

There are a wide range of developmental programmes being supported by the Government like Swarna Jayanti Gram Swarajgar Yojana (SGSY), National Rural Employment Guarantee Scheme (NREGS), Rastriya Swasthya Bima Yojana (RSBY), Rastriya Health Mission (RHM), Aam Aadmi Bima Yojana (AABY), Indira Awas Yojana (IAY), Public Distribution (PDS), old age allowances, drought relief etc. which have facilitated the improvement of income levels of poor households. The public-package of - Doubling Flow of Agricultural Credit has also enabled greater institutional credit flow for agriculture and allied activities. However, all these policy interventions, though ambitious in stated intent, only incidentally address household risks. The most vulnerable rural population, particularly women, older people and rural people are mostly excluded from the insurance market. It implies the need of this segment of population for protection of their lives / income-generating assets against various perils. At present, Personal Accident Insurance Scheme (PAIS) which is being provided as a bundled offering along with the Kisan Credit Card (KCC) Scheme and the Rashtriya Krishi Bima Yojana (RKBY) for insuring crops, are, probably, the only borrowed-linked risk mitigation mechanisms available to rural households. Similarly, the progress in enrolment of the poor in the Rashtriya Swasthya Bima Yojana (RSBY) in its sixth year of operation does not seem to meet the target to cover all poor by 2015. Under this situation, prospect of micro insurance is expected to be much wider and challenging, especially with huge network of financial infrastructure in the country. For instance, many commercial banks have partnered foreign insurance companies for providing life insurance policies. Thus, banking outlets (which number close to 70,000) and more than 1 lakh cooperative societies could provide the needed outreach to purvey micro-insurance facilities without much addition to transaction costs. Unfortunately, the desired outreach and efficacy of micro insurance sector in India has not been achieved.

## 2.1 VIABILITY OF MICRO INSURANCE IN INDIAN SCENARIO

What happens when a poor family's breadwinner dies, when a child in a disadvantaged household is hospitalised, or the home of a vulnerable family is destroyed by fire or natural disaster? Every serious illness, every accident and every natural disaster threatens the very existence of poor people and usually leads to deeper poverty. It is important that maximum Indians are provided a social security blanket to safeguard their future. The need for micro-insurance thus becomes critical. But micro-insurance does not get its prominence for the following reasons

1. Ten myths about demand for micro insurance
2. People don't buy micro insurance because they don't understand it
3. People can't afford to buy micro insurance
4. After a shock, people are more likely to buy micro insurance
5. People don't buy micro insurance because they don't trust the insurance industry.
6. People buy micro insurance when premiums are low
7. People buy micro insurance when they are convinced
8. People buy micro insurance when the product is actuarially fair
9. People don't value free things, not even free micro insurance
10. Micro insurance always sells better when bundled with other financial services
11. Men, the middle-aged and the risk-averse, buy more micro insurance

## 2.2 AIMS AND OBJECTIVES OF THE STUDY

1. Emphasize the importance of micro insurance to the people of the low income group and below poverty line
2. Create awareness about micro insurance among people of udupi
3. analysing the needs and wants of a low income group of people with respect to the micro insurance,
4. designing micro insurance products which suit their needs and requirements.

## 2.3 SCOPE OF THE STUDY

The project covers samples across various respondents in the villages in and around the Udupi city and also the people from the insurance industry. The study focuses on analysing the needs and wants of a low income group of people with respect to the micro insurance, creating awareness among them, designing micro insurance products which suit their needs and requirements. Apart from that, various attributes like the most influential external factors which form the distribution channel in selling the insurance products, the technology to be used in the promotion of new products and the various ways to reach out the

targeted group is discussed. This enables to assess the various factors that affect the overall satisfaction levels of consumers towards fashion apparels in the city. It also encompasses certain improvement factors from the viewpoint of targeted group that will help the insurance industry to serve their customers better.

#### 2.4 SIGNIFICANCE OF THE STUDY

The study carried out has been significant in knowing about the statistical ratio of people and the property insured. The ratio of people insured to not insured is very meagre. Lack of awareness of such micro insurance products existing is itself something surprising to the targeted group of people. Even those people who can afford and willing to afford are not covered as they are not aware of such schemes. Promotion of micro insurance products to the rural society is much more difficult than to the urban society. Self Help Groups, Non profit organisations must be involved in the promotion activities which will have a quick reach out to the people of the rural areas. New micro insurance products introduced must be designed after consulting with them so that it suits their needs and requirements. The premium amount being less, instalment options and affordable, the Sum Insured being adequate, group policies are some of the considerations.

#### 2.5 LIMITATIONS OF THE STUDY

1. The samples selected may not be a true representation of the market.
2. The data supplied by the respondents may not be true to the fullest extent.
3. The study was restricted only to the people in the villages in and around Udipi.

### 3. LITERATURE REVIEW

In this section we have summarized findings and major issues of some important studies and reports on micro insurance in general and in India in particular with focus on household risks and risk managing strategy, outreach of micro insurance products, major policy regulation and constraints. It helps us to develop a framework for analysis of the present study which is presented in subsequent chapters. Available literature evaluating the impact of insurance in low - income countries is limited. There is also unbalance between different types of insurance products. Overall, the emphasis is concentrated on different health insurance schemes, and their impact on health care utilization, out-of-pockets expenditure or social inclusion. Very few studies evaluate the impact of insurance on household income, nutrition, or other dimensions of welfare than those directly related to the insurance. Study on other insurance products are also limited and hindered by the lack of systematic baseline data on individual beneficiaries and groups.

Cohen and Sebstad (2006) highlighted the need to carefully study of clients' insurance needs before introducing a new product, where market research can include studying (i) clients' needs, (ii) specific products, or (iii) the size of the potential market. Analyzing insurance demand from Uganda, Malawi, Philippines, Vietnam, Indonesia, Lao P.D.R., Georgia, Ukraine and Bolivia they found that the most prevalent risks relate to health and loss of wage earners. In a recent study by Ito and Kono (2010) on health micro insurance in Karnataka, India found that take - up rates of micro insurance have been low despite its perceived need and the enthusiasm of micro finance practitioners. They found some evidence that people behave in a risk - loving way when facing the risk of losses. However, despite these patterns, households' priorities regarding demand for insuring risks are nevertheless context specific. More research is essential to understand and identify the means for increasing insurance take - up rates and decreasing dropout rates.

A general understanding about attributes of micro insurance products from a client perspective is awareness, easy to understand, simple, affordable, valuable and trust. These factors are determinants of uptake and therefore, determine the impact of micro insurance at household level. As regard, to supply of micro insurance products some common findings are emerged

from across studies. While different perspective of different stakeholders constitutes as a major supply constraint, availability of suitable distributive channel, pricing and regulation determine the overall supply of micro insurance products. Interestingly, most of the low segment insurance markets are supply driven. From the insurers' perspective, micro insurance opens a huge market, especially for the ones facing market saturation. Insurers aim to develop new business models that create mechanisms which cater to this low-income market who will be future high-income clients. Unfortunately, standardized insurance product may not respond to client needs. A Study of this viability of micro insurance product is presented below.

### 4. RESEARCH METHODOLOGY

The project is done by conducting face-to-face interviews with the people from the villages in and around the city of Udipi, the Agents of the General Insurance Industry and the employees of the Insurance Industry through structured questionnaires. The respondents from the villages and the agents are selected at random in the city of Udipi.

#### 4.1 RESEARCH DESIGN

A descriptive study design is one in which the primary goal is to assess a sample at one specific point in time without trying to make inferences or causal statements. In general, there are three primary reasons to conduct descriptive studies:

- To identify areas for further research.
- To help in planning resource allocation (needs assessment).
- To provide informal information about a condition.

Since the project aims at identifying the needs and requirements of the low income group people with respect to Micro insurance products, a thorough descriptive study is done.

#### 4.2 DATA COLLECTION

The data required for the study have been collected from primary sources.

**Primary Data:** The primary data necessary for the study include the information collected from people from the villages in and around the city of Udipi, the Agents of the Insurance Industry and the employees of the Insurance Industry. A structured questionnaire has been used as an aid to collect the data from the respondents. The samples have been collected from the respondents with the help of a questionnaire by conducting face-to-face interviews.

#### POPULATION

The survey is taken from the customers among the people from the villages in and around the city of Udipi, the Agents of the Insurance Industry and the employees of the Insurance Industry in the city of Udipi.

#### SAMPLE

A sample comprises of some members selected from the population. It is, basically, a subset of the entire population. The sample size for the study is 100.

#### 4.3 SAMPLING TECHNIQUE

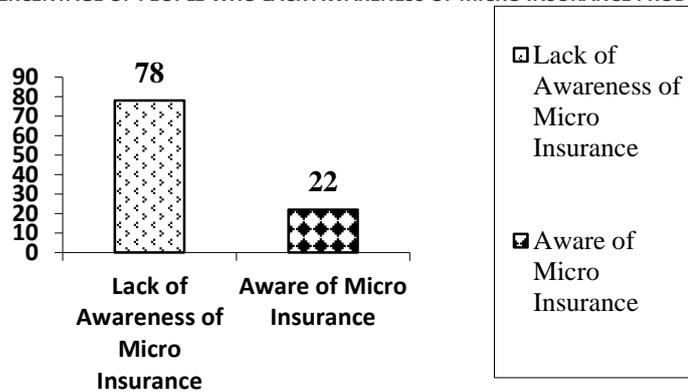
The sampling technique employed for this study is non probabilistic convenient sampling. However, broadly speaking the sampling employed also falls under Area sampling technique, as the identifiable geographic area in the study is Udipi city limits.

### 5. DATA ANALYSIS AND INTERPRETATION

#### LACK AWARENESS OF MICRO INSURANCE PRODUCTS

Lack Of Awareness of Micro Insurance (%)	Aware of Micro Insurance (%)
78	22

FIG. 5.1: PERCENTAGE OF PEOPLE WHO LACK AWARENESS OF MICRO INSURANCE PRODUCTS



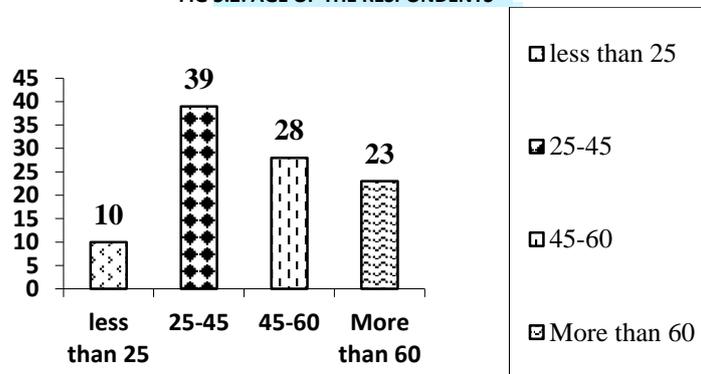
**Inference**

The Figure 5.1., shows that about 22% of the people of the targeted group are aware of the micro insurance products whereas 78% of the people lack awareness.

**AGE OF THE RESPONDENTS**

Age limit	No. of respondents
Less than 25	10
25-45	39
45-60	28
More than 60	23

FIG 5.2: AGE OF THE RESPONDENTS



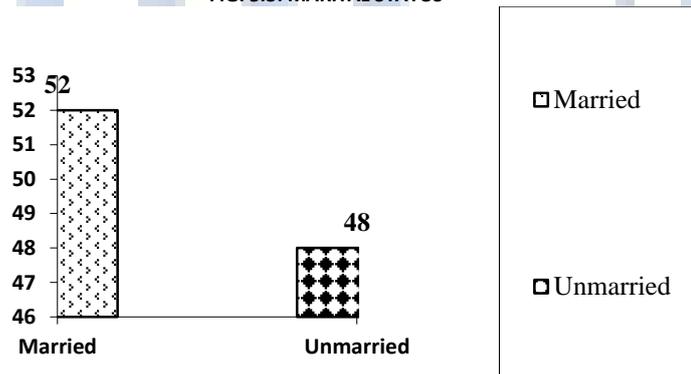
**Inference**

From the above table and figure, we can see that 39% of the customers are of the age group 25 to 45 and 28% are of the age group 45 to 60 years. Only 10% are less than 25 years and 23% are in the age group of more than 60 years.

**MARITAL STATUS**

Marital status	No. of respondents
Married	52
Unmarried	48

FIG. 5.3: MARITAL STATUS



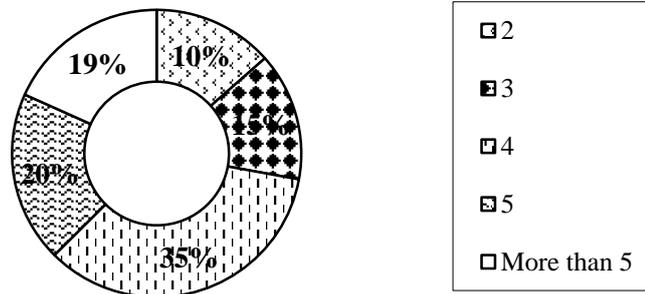
**Inference**

The table shows that about 52% of the customers are unmarried with the rest 48% being married.

**FAMILY SIZE**

Family size	No. of respondents
2	10
3	15
4	36
5	20
More than 5	19

**FIG. 5.4: FAMILY SIZE**



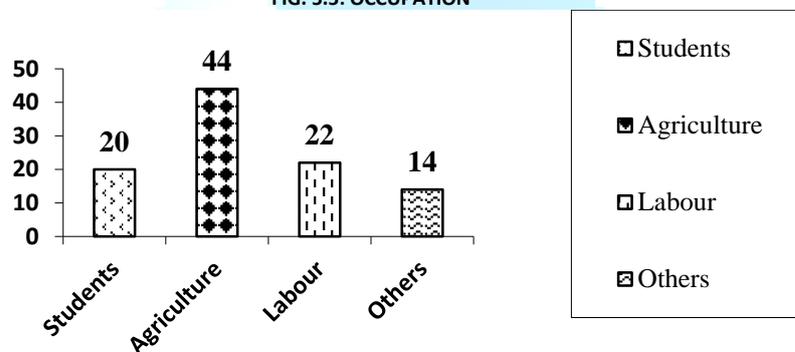
**Inference**

The data above shows that 36% of the customers are with a family size of 4 and 20% have their family size as 5.

**OCCUPATION**

Occupation	No. of respondents
Students	20
Agriculture	44
Labour	22
Others	14

**FIG. 5.5: OCCUPATION**



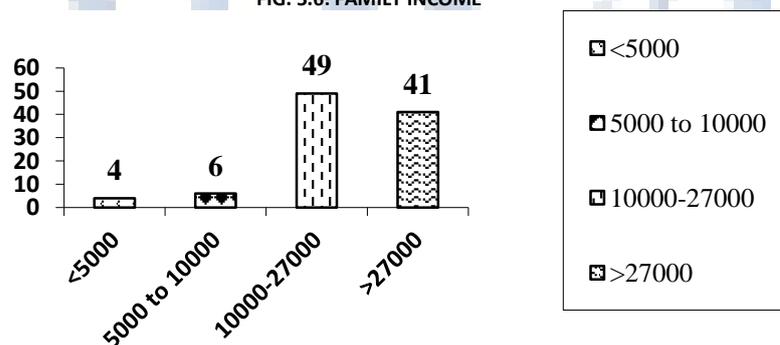
**Inference**

We can see that 41% of the respondents are from agricultural background and 23% of them are students. 22% were people engaged in labour work and the rest 14% belonged to other occupations like graduates, housewives, poultry work etc.

**FAMILY INCOME**

Family income	No. of respondents
Less than 5000	4
5000-10000	6
10000-27000	49
More than 27000	41

**FIG. 5.6: FAMILY INCOME**



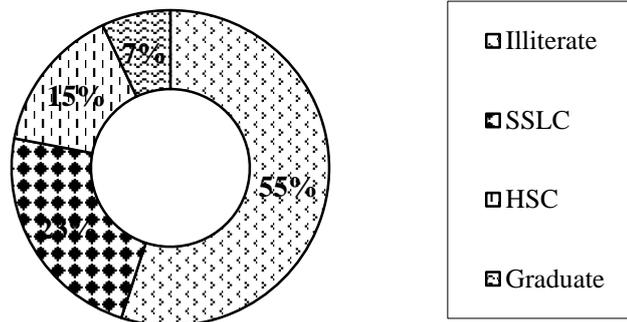
**Inference**

49% of the respondents belonged to the income group of 10000 to 27000 and 41% of them have an annual income of more than 27000.

EDUCATIONAL QUALIFICATION

Educational Qualification	No. of respondents
Illiterate	55
SSLC	23
HSC	15
Graduate	7

5.7: EDUCATIONAL QUALIFICATION



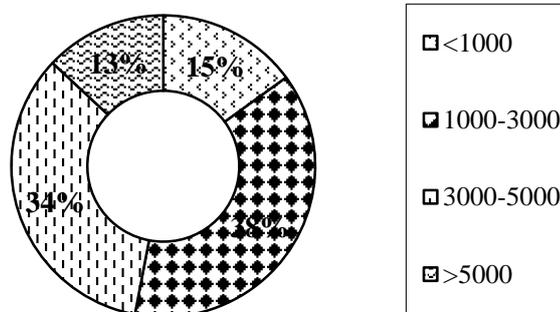
Inference

The above table and figure show that 55% of the respondents are illiterates. 23% of them have the educational qualification of SSLC.

HOSPITAL EXPENDITURE

Expenditure (in Rs)	No. of respondents
Less than 500	15
500-1000	38
1000-5000	34
More than 5000	13

5.8: HOSPITAL EXPENDITURE



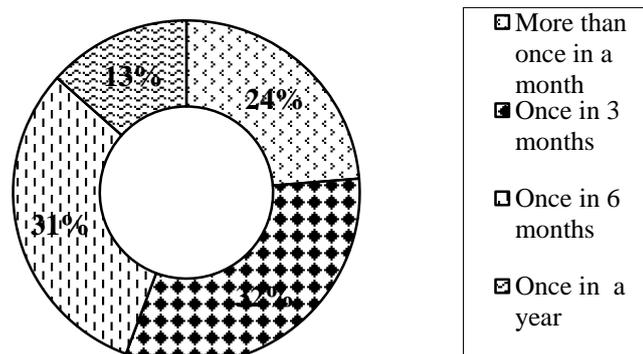
Inference

38% of the respondents spend about Rs.500 to Rs. 1000 in one visit to the hospital. 34% of them buy in the range of Rs. 1000 to 5000/-

FREQUENCY OF HOSPITAL VISIT

Frequency of Hospital Visit	No. of respondents
More than once in a month	26
Once in 3 months	31
Once in 6 months	30
Once in a year	13

FIG. 5.9: FREQUENCY OF HOSPITAL VISIT



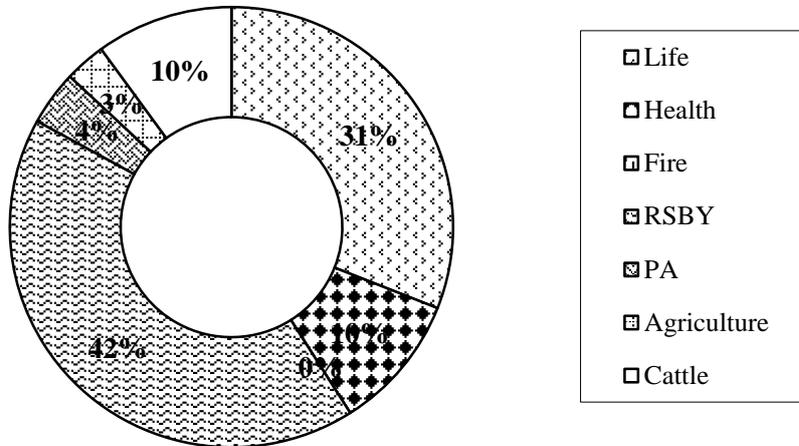
Inference

The frequency of hospital visit is 31% of them visit once in 3 months. 30% of them visit once in 6 months and 26% of them more than once in a month. The rest 13% once in a year.

**AWARENESS OF INSURANCE PRODUCTS**

Awareness of Insurance Products	No. of respondents
Life Insurance	31
Health Insurance	10
Fire Insurance	0
RSBY	42
Personal Accident	4
Agriculture	3
Cattle	10

FIG. 5.10: AWARENESS OF INSURANCE PRODUCTS



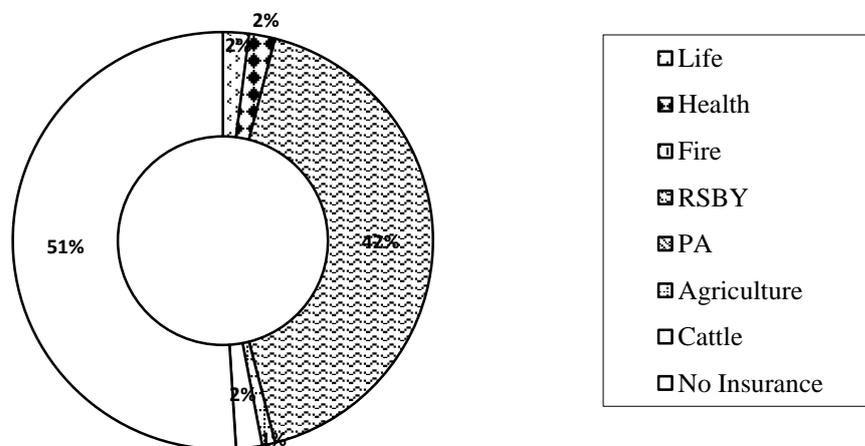
Inference

42% of the respondents are aware of RSBY scheme, 31% are aware of Life Insurance, 10% of them are aware of Cattle and Health, 4% of them are aware of Personal Accident, 3% of them are aware of Agriculture and no one is aware of Fire Insurance.

**INSURANCE COVERAGE**

Insurance Coverage	No. of respondents
Life Insurance	2
Health Insurance	2
Fire Insurance	0
RSBY	42
Personal Accident	0
Agriculture	1
Cattle	2
No Insurance	51

FIG. 5.11: INSURANCE COVERAGE



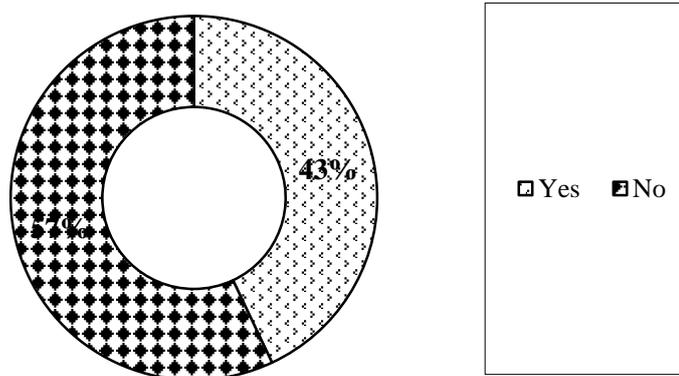
Inference

51% of the respondents do not have any Insurance Policy and 42% of the respondents are covered under RSBY scheme introduced by the government.

**APPROACH OF REPRESENTATIVES FROM INSURANCE INDUSTRY**

Approach of Representatives from Insurance Industry	No. of respondents
Yes	43
No	57

FIG. 5.12: APPROACH OF REPRESENTATIVES FROM INSURANCE INDUSTRY



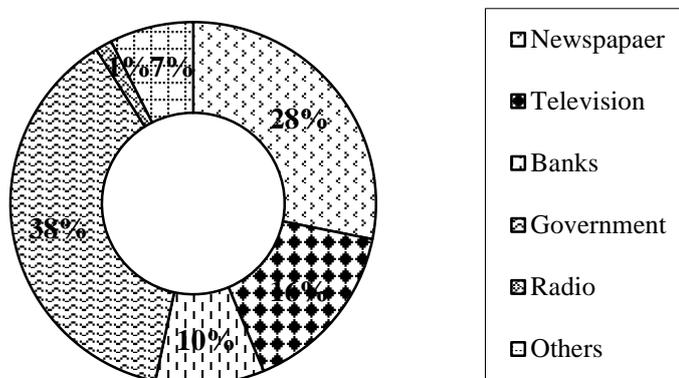
**Inference**

From the above data we can see that 43% of the representatives from the Insurance Industry have approached for marketing and the rest 57% of the respondents say they have not been approached.

**SOURCE OF INFORMATION**

Source of Information	No. of respondents
Newspaper	3
Television	21
Banks	13
Government	51
Radio	2
Others	10

FIG. 5.13: SOURCE OF INFORMATION



**Inference**

We can see that 51% of the respondents have their source of information from the Government, 21% of them through television, 13% through banks.

**6. MAIN FINDINGS/OUTCOME OF THE STUDY WITH RESPECT TO OBJECTIVES**

This study carried out emphasizes the point that the people from the low income group and BPL families are not aware of the benefits of micro insurance products which exists with the insurance companies today. They feel ignored by the society for left uncared. Even though they are covered under certain government schemes they are not able to make full utilization of them as they are not provided education on them like whom to approach in case of contingencies, where to report the unexpected event etc. The distribution channels for promotion of micro insurance products are not much effective.

**7. CONCLUSION**

Low demand for micro insurance is a complex problem, with many factors determining whether or not an individual buys insurance. Although the evidence is not conclusive, several lessons can be drawn from this review. Trust, liquidity constraints, the quality of the client value proposition and behavioral constraints are the most important determinants of demand. Mitigating those challenges has the strongest impact on take-up. The data on renewals suggests that increasing understanding of insurance, as well as improving client value proposition and overcoming behavioral constraints, can significantly boost renewals, thereby lowering customer acquisition costs. Personal characteristics such as risk aversion, age and gender do not appear to affect demand strongly.

There are cost-effective ways of significantly boosting demand. Practitioners need to understand the demand puzzle in its context, identify the most important determinants and design specific marketing strategies. Experience shows that acting on value proposition, trust and behavioral constraints are the most cost-effective ways of boosting demand. Incorporating these factors into a marketing strategy does not need to be expensive. Some strategies, such as including value-added services, using trusted messengers or SMS reminders, address those determinants and can be deployed quickly without excessive investment. However, simply implementing the strategies is not enough. It is critical to continue evaluating their cost-effectiveness so as to improve market understanding and to keep adjusting marketing strategies in order to maintain high demand.

Gaps remain in understanding the demand for micro insurance. More work is required to identify ways of overcoming behavioral constraints and building trust. Both these drivers are important, and more research is needed on the effectiveness of related marketing strategies. More research is also required in order to exploit complementarities between formal and informal practices, for instance by offering insurance via the vehicle of a pre-existing, informal group. Finally, more attention should be given to the problem of low renewal rates, an issue largely neglected to date.

**8. RECOMMENDATIONS**

- The insurance companies should try to focus on meeting the varying needs and requirements of the people in the rural areas.
- Additional commission or incentive schemes to be introduced for the Agents in the distribution channel.
- Simple language must be used while explaining to people and not in insurance parlance.
- The process of taking insurance must be simplified that is not complicated and time consuming. Representatives from the insurance company must be easily approachable in extending their help at the time of claim.
- Promotion through media must be made through advertisements.
- MFIs (Micro Finance Institutions), NGOs (Non Governmental Organizations), Regional Rural Banks, Self-help groups (SHGs) and their federations and cooperatives can be made used.
- New innovations and technologies must be used to reach and every individual in the rural areas like Mobile banking.

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## REACHING TOWARDS ORGANIC FARMING

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## ABSTRACT

Agriculture sector contributes a major portion in gross production of India. In spite of this, agriculture today is finding itself in increasing difficulties. The adverse impact of agriculture based on synthetic fertilizers and herbicides is visible in the degradation of soil fertility, quality of food, taste of food and so on. Above this continuously increasing demand for food by burgeoning human population, rising risk of agriculturally driven global environmental changes and food related health hazards due to excessive use of agrochemicals have become the prime concern of the globe. Hence, increasing consciousness about future sustainable agriculture and hazard free food production has lead organic farming at the zenith of the farm practices. Instead of much limelight, it is found that the consumers are very less aware of organic farming. The aim of this paper is to empirically analyze the consumer awareness about organic food and products. To study how much is the awareness & what are the reasons they are not aware about it, a close and open ended questionnaire was administered and responses are checked. The study is purely based on primary data collected from a sample of 100 respondents. Convenient random sampling technique is used to find out the consumer awareness about organic farming.

## KEYWORDS

organic farming, consumer awareness, organic produces, eco-friendly environment.

## INTRODUCTION

In today's terminology it is a method of farming system which primarily aims at cultivating the land and raising crops in such a way, as to keep the soil alive and in good health by use of organic wastes (crop, animal and farm wastes, aquatic wastes) and other biological materials along with beneficial microbes (biofertilizers) to release nutrients to crops for increased sustainable production in an eco-friendly pollution free environment. Organic farming to agriculture is often described in spatial terms such as "close to," "going back to," and "following" nature, and correspondingly represent a production process that is local, farmer-led, and relies on minimal external inputs, especially in terms of science and technology.

Since organic farming means placing farming on integral relationship, we should be well aware about the relationship between the soil, water and plants, between soil-soil microbes and waste products, between the vegetable kingdom and the animal kingdom of which the apex animal is the human being, between agriculture and forestry, between soil, water and atmosphere etc. It is the totality of these relationships that is the bed rock of organic farming.

## ORGANIC AGRICULTURE IN INDIA

Since January 1994 "Sevagram Declaration" for promotion of organic agriculture in India, organic farming has grown many folds and number of initiatives at Government and Non-Government level has given it a firm direction. While National Programme on Organic Production (NPOP) defined its regulatory framework, the National Project on Organic Farming (NPOF) has defined the promotion strategy and provided necessary support for area expansion under certified organic farming.

## GROWING CERTIFIED AREA

Before the implementation of NPOP during 2001 and introduction of accreditation process for certification agencies, there was no institutional arrangement for assessment of organically certified area. Initial estimates during 2003-04 suggested that approximately 42,000 ha of cultivated land were certified organic. By 2009 India had brought more than 9.2 million ha of land under certification. Out of this while cultivable land was approximately 1.2 million ha, remaining 8 million ha area was forest land for wild collection. Growing awareness, increasing market demand, increasing inclination of farmers to go organic and growing institutional support has resulted into phenomenal growth in total certified area during the last five years. As on March 2009, total area under organic certification process stood at 12.01 lakhs.

TABLE NO.1: TEN COUNTRIES WITH THE MOST ORGANIC AGRICULTURE LAND 2011

Sr. No.	Country	Land(million hectares)
1	Australia	12.0(2009)
2	Argentina	3.8
3	United States	1.9(2008)
4	China	1.9
5	Spain	1.6
6	Italy	1.1
7	India	1.1
8	Germany	1.0
9	France	1.0
10	Uruguay	.9(2006)

Source: FIBL-IFOAM survey 2013, based on data from Govt., the private sector and certifiers)

## IMPORTANT FEATURES OF INDIAN ORGANIC SECTOR

With the phenomenal growth in area under organic management and growing demand for wild harvest products India has emerged as the single largest country with highest arable cultivated land under organic management. India has also achieved the status of single largest country in terms of total area under certified organic wild harvest collection. With the production of more than 77,000 MT of organic cotton lint India had achieved the status of largest organic cotton grower in the world a year ago, with more than 50% of total world's organic cotton.

## GROWING ORGANIC FOOD MARKET

Although no systematic information is available on size of organic food market by as per the survey conducted by the International Competence Centre for Organic Agriculture (ICCOA) in top 8 metro cities of India (which comprise about 5.3 % of the households) the market potential for organic foods in 2006 in top 8 metros of the country is at Rs 562 crore taking into account current purchase patterns of consumer in modern retail format. The overall market potential is estimated to be around Rs.1452 crore.

**REVIEW OF LITERATURE**

**According to RAJIV K. SINHA (1998)** has tried to explore the origin of the traditional agriculture with the help of certain case studies. Modern technology is helpful in increasing the output, but wholly depends upon it, will reduce the fertility of the land. So traditional methods are advisable to increase the fertility of the land

**A. Kuhar1 and L. Juvancic (2001)** focus on general dietary patterns and lifestyle determination; purchasing behavior acquaintance, believes and perception of OIFV and purchase frequency of OIFV. As per this study people of Slovenia are more conscious regarding their health as compare to environmental disaster. People are not aware about organic farming. So there is need of promotional activities.

**Raffaele Zanolli and Simona Naspetti (2002)** analysed the factors and barriers of consumer behavior towards organic foods with the help of means-end chain model. They found that two key factors, experience and expertise, plays crucial role in formulating consumer perception towards organic products and a better communication strategy should be formulated to create awareness among the consumers regarding organic products and their numerous benefits.

**Samuel Bonti-Ankomah (2006)** has made comparison between organic and conventional agriculture methods. As per this study people are ready to pay more price for organic products than conventional products. Quality and output aspects are also analyzed. As per findings output is low in case of organic farming but quality is better than conventional farming.

**Zhou Lili, Chen Tong (2007)** explored the core reasons of feeble consumer perception towards organic food were lack of knowledge and awareness among the consumers for organic food. The study revealed that a good chunk of consumers are willing to buy and pay more for organic food but they need to educate more to differentiate between organic and green food in the market. For this the producers should pull up their socks to enrich the knowledge of the target consumers through good advertisement, sales and promotional strategies.

**Cissy Bowman (2008)** has answered the questions like how an organic consumer becomes more aware of such products. What stringent measures organic companies, retailers and producers should take in order to win the confidence of the consumers and hence expand organic market. He also focused on National Organic Program (NOP) to ensure that organic standards are met in compliance with the labels on them.

**J. Pandey & Usha Pandey (2008):** This study has investigated the accumulation of air-borne heavy metals in edible parts of vegetables and in cultivated soil horizon in organic farming system in a low rain fall tropical region of India. The results of this study indicate that continued atmospheric deposition of heavy metals will have a destabilizing effect on soil fertility in long-run. The study further suggests that atmospheric deposition was the main contributor to raised heavy metals in edible parts, especially in fruits and leaves. The study clearly demonstrated that if the present trends of atmospheric input of heavy metals are continued, it will undermine the real objectives of organic farming in long-run.

**Siti Nor Bayaah Ahmad and Nurita Juhdi (2010)** try to understand consumer motivations for buying organic food products so that organic producers could develop more effective strategic marketing planning. In the light of these objective author is able to conclude that price become barrier in the usage of organic products. Govt initiative regarding the promotion of organic farming is also not appreciable.

**Organic farming, food quality and human health (A review of the evidence) 2012:** The object of this report is to scrutinize the available scientific evidence and to throw light on comparisons of organically and non-organically produced fruits, vegetables and cereals, Livestock products. It also assess the qualitative differences about organic food which are most important to the promotion of good health, specifically the four areas Food Safety, Primary Nutrients, Secondary Nutrients and Observed Health effects and ended up the document with number of recommendations and suggestions to consumers, researchers, producers and government.

**OBJECTIVES OF THE STUDY**

1. To study the awareness of organic farming
2. To study the demand of the organic farming

**NEED OF THE STUDY**

Organic farming is one of the burning issues in each and every economy these days. Number of researches has been conducted on organic farming in context with farmers, government policies regarding organic farming, techniques of organic farming, benefits and advantages of organic farming, consumer's perception towards it and so on. But still there are number of other factors that need more intense research to get the clear picture of organic scenario. Hence, the kingpin of the market, the consumer and his knowledge regarding organic farming is our main concern. The current study is going on to find out the awareness and demand among the consumers towards organic products.

**RESEARCH METHODOLOGY**

Research can also be defined as the search for knowledge or any systematic investigation to establish facts.

**RESEARCH DESIGN**

Descriptive Research: It has described information collected through questionnaires and analyzes the information to make a critical evaluation of subject.

Sample Size: Considering the constraints it was decided to conduct the study based on sample size of 100. It comprises 56 females and 44 males.

Sampling Unit: The respondents include students, teachers, housewives, professionally qualified persons, shopkeepers, businessmen.

**SOURCES OF DATA**

Primary data: Primary data is collected by meeting the concerned people through questionnaire and personal interview.

**TOOL OF ANALYSIS**

In the project work, quantitative technique & percentage method have been used.

**DATA ANALYSIS AND INTERPRETATION**

Table no.2 depicts that 71% of the people knew about organic products whereas 29% were unaware rather organic farming is a novel term for them. This shows that a good chunk of people are aware about organic farming.

**TABLE 2: DISTRIBUTION OF SAMPLE RESPONDENTS ON THE BASIS OF AWARENESS**

Response	No. of Respondent	%age of Respondent
Yes	71	71
No	29	29
Total	100	100

Source: Field investigation

Table no. 3 represents that 30% people have heard about organic farming from their friends or family, 10% from radio, 15% from newspaper, 18% from television, 20% from internet and 7% get to know about it from other sources like magazines, books and seminars etc.

**TABLE 3: MEANS OF AWARENESS REGARDING ORGANIC FARMING**

Response	No. of Respondent	% age of Respondent
Radio	10	10
Newspaper	15	15
Television	18	18
Family/Friend	30	30
Internet	20	20
Other	7	7
Total	100	100

Source: Field investigation

It can be inferred that people are quite aware about organic farming as maximum no. of people know about organic farming from their friends and family.

**TABLE 4: DISTRIBUTION OF SAMPLE RESPONDENTS ON THE BASIS OF USE OF ORGANIC PRODUCTS**

Response	No. of Respondent	%age of Respondent
Yes	43	43
No	47	47
Don't Know	10	10
Total	100	100

Source: Field investigation

Table no.4 represents that how many respondents have used organic products or foods, 43% said yes they have used them and 47% said no and 10% said that they don't know about it as they are not aware about organic foods or products.

**TABLE 5: DISTRIBUTION OF SAMPLE RESPONDENTS ON THE BASIS OF KNOWLEDGE OF ORGANIC PRODUCTS**

Responses	No. of Respondent	%age of Respondent
Poor	25	25
Fair	15	15
Average	30	30
Good	25	25
Excellent	5	5
Total	100	100

Source: Field investigation

When the respondents were asked to rate their knowledge of organic farming then table no.5 depicts that 15% rated it fair, 25% rated good, 30% average, 25% poor, and 5% rated it excellent, which shows people have good knowledge about organic farming.

**TABLE 6: RESPONSE OF SAMPLE RESPONDENTS REGARDING VISIT TO ORGANIC FARMS**

Response	No. of Respondent	%age of Respondent
Yes	86	86
No	11	11
Don't Know	3	3
Total	100	100

Source: Field investigation

Table no.6 depicts that 86% people want to visit the organic farm to know more about organic farming. Only 11% didn't want to visit organic farm and 3% said don't know. This makes it apparent that people are curious to know about organic farming.

**TABLE 7: DISTRIBUTION OF SAMPLE RESPONDENTS ON THE BASIS OF USE OF ORGANIC PRODUCTS**

Response	No. of Respondent	%age of Respondent
Yes	43	43
No	47	47
Don't Know	10	10
Total	100	100

Source: Field investigation

Table no.7 represents that how many respondents have used organic products or foods, 43% said yes they have used them and 47% said no and 10% said that they don't know about it as they are not aware about organic foods or products.

**TABLE 8: DISTRIBUTION OF SAMPLE RESPONDENTS ON THE BASIS OF TASTE OF ORGANIC PRODUCTS**

Responses	No. of Respondent	%age of Respondent
Better than traditional meal	32	74
Equal to traditional meal	10	23
less than traditional meal	1	3
Total	43	100

Source: Field investigation

Table no.8 depicts that 74% people find the taste of organic foods quiet better than traditional food, 23% equal to traditional food and % find it less tasty than traditional food. It seems that people are satisfied with the taste of organic products.

**TABLE 9: DISTRIBUTION OF SAMPLE RESPONDENTS ON THE BASIS OF QUALITY OF ORGANIC PRODUCTS**

Response	No. of Respondent	%age of Respondent
Better than traditional meal	32	74
Equal to traditional meal	10	23
less than traditional meal	1	3
Total	43	100

Source: Field investigation

Table no. 9 displayed that 74% people find the quality of organic foods quiet better than traditional food, 23% equal to traditional food and % find it less tasty than traditional food. It seems that majority of people are satisfied with the quality of organic products.

TABLE 10: DISTRIBUTION OF SAMPLE RESPONDENTS ON THE BASIS OF APPEARANCE OF ORGANIC PRODUCTS

Response	No. of Respondent	%age of Respondent
Better than traditional meal	18	42
Equal to traditional meal	23	53
less than traditional meal	2	5
Total	43	100

Source: Field investigation

Table no.10 shows that 42% people find the appearance of organic foods or products better than traditional food or products, 53% equal to it and 5% didnt like it more than traditional foods or products.

TABLE 11: WILLINGNESS OF SAMPLE RESPONDENTS FOR CHOOSING ORGANIC PRODUCTS

Response	No. of Respondent	%age of Respondent
Yes	86	86
No	11	11
Don't Know	3	3
Total	100	100

Source: Field investigation

Table no.11 states that 86% of respondents want to consume organic produces but because of lack of availability and awareness they are not been able to do so, 11% said no to organic products due to their traditional tastes and preferences and 3% said that they don't know whether they want to consume organic foods or products or not.

TABLE 12: DISTRIBUTION OF SAMPLE RESPONDENTS ON THE BASIS OF REASONS FOR CHOOSING ORGANIC PRODUCTS

Response	No. of Respondent	%age of Respondent
Healthy	41	48
Tasty	10	12
Pesticide Free	28	32
Environment friendly	7	8
Appearance	0	0
Others	0	0
Total	86	100

Source: Field investigation

When respondents were asked the reason of choosing organic products over traditional ones then 41% said they are healthy, 28% said because they are pesticide free, 10% said because of taste and 75 find these products environment friendly. Hence, this proves that people nowadays are very health conscious and they want to consume organic foods for maintaining good health.

**FINDINGS OF THE STUDY**

- People have quite a good knowledge about organic farming through various mass media and personal sources but still a lot of people are unaware and are not well informed about organic food about it because of less sales and promotional activities.
- 51% of consumers have never used organic foods and products as they possess knowledge about them and can hardly differentiate between organic and normal foods and products in the marketplace.
- Majority of organic consumers are satisfied with the tastes, quality and appearance of the organic products and want to continue buying organic products.
- The study exhibits that 71% are familiar with organic farming, 86% people want to consume organic food and products and 43% are using organic produces. This states that majority is familiar with and has the willingness to buy and consume organic produces but because of lack of availability and education about organic products very less is able to consume them.
- This study also highlights that the fact that though great number of people reflect positive attitude towards willingness for buying organic produces yet 11% is still reluctant to buy them as they find organic products expensive.
- 48% people consider organic foods healthy, 32% pesticide free, 12% tasty and 8% environment friendly. This states that people have become more health conscious and concerned to the environment.
- Another finding of the study is though people are not much aware of the word "organic" yet they are lot more curious to see the organic farms and upgrade their knowledge of how these organic foods are grown and products are made.

**CONCLUSION AND SUGGESTIONS**

In the light of above mentioned objectives of the study and survey analysis, the following suggestions can be given:

- The organic producers must create awareness in the consumers about organic products by imparting education on this subject and tell them how to make distinction between normal and organic foods and products. Hence, education should become their foremost objective.
- There should be sales and promotional activities on a large scale through mass media. Huge advertisement should be made at selling places, mandis, agricultural fairs and open markets etc.
- Organic producers must approach to educational institutions for making trip to organic farms, to make youth aware about organic farming.

**LIMITATIONS**

- However the researcher has tried their best in collecting relevant information for research, yet there have been some problems faced by the researchers. The prime difficulties that were faced while collecting information are discussed below:-
- **Time Constraint:** the time period for carrying out research has been limited as a result of which many facts are left unexplored. If more time had been there, the sample size would have been increased.
- **Limited Sample size:** The sample size is very small of about 100 respondents. Due to which the findings could not be generalized properly.
- **Wide area of research:** The area of study has been wide which may have created problem to study whole population.
- **Respondents' bias:** due to biasness on the part of respondents, data collected may have affected which further reduces credibility of the findings.

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## PERFORMANCE OF INDIA'S AND CHINA'S MANUFACTURING GOODS EXPORT TO BANGLADESH: CONSTANT MARKET SHARE ANALYSIS

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### ABSTRACT

*Bangladesh has been an important market for India's exports of manufactured goods in the South Asia region. China has, in the last decade, over taken India to become the number one exporter in Bangladesh market. This did not however lead to a decline in India's market share in Bangladesh indicating that India has gained market share at the cost of other exporters. The objective of this paper is to examine how competitiveness, product composition and product adaptation have contributed to both India and China increasing their market share in Bangladesh. The analysis is done using the Constant Market Share Analysis. The period of study is 2005-14. The study finds that China's impressive performance has been because its exports have been very competitive vis-a-vis the other countries exporting to Bangladesh. India's export performance though poor during 2005-10 has shown a remarkable improvement in competitiveness during 2010-14. Improvement in competitiveness was seen in India's exports of both, the labour intensive and capital/technology intensive goods but more so in the latter. On the other hand, China's comparatively less impressive increase in market share during 2010-14, compared to that in 2005-10, was because of a decline in competitiveness of its exports of labour intensive goods and significant negative contribution to product composition effect by its capital/technology intensive exports to Bangladesh.*

### KEYWORDS

India, China, Bangladesh, manufactured exports, competitiveness, constant market share analysis.

### JEL CODE

F1, F14.

### 1. INTRODUCTION

Bangladesh has been one of the important markets for India's manufacturing exports in the South Asia region. On an average, more than 40 per cent of India's manufacturing goods exports to South Asia have gone to Bangladesh during 2005-2014. If we also include the large volume of goods being smuggled from India into Bangladesh and, the over- and under invoicing in formal trade then India's exports to Bangladesh are even higher. On the other hand, India used to be the main source of imports for Bangladesh during the 1990s. Thereafter China has overtaken India relegating India to the second position. In the last decade China's manufacturing exports to Bangladesh have expanded significantly and China's share in Bangladesh's imports from the world has increased from 26.7 per cent in 2005 to 43.2 per cent in 2014. Despite the increasing engagement of China, India has not lost market share in Bangladesh imports which has grown from 10.3 per cent in 2005 to 14.7 per cent in 2014. This shows that India has gained market share in Bangladesh's market vis a vis other countries that export to Bangladesh. However compared to China, increase in India's share cannot be characterised as impressive despite the fact that the India and Bangladesh are countries that share a common border, common history and common culture. India and Bangladesh are also signatories to South Asian Free Trade Area (SAFTA) as well as to Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). Both Agreements allows trade between the member countries under preferential tariffs which would give India's exports a price advantage. While it has been argued that India's trade with its neighbours is less because of problems of poor infrastructure, high non-tariff barriers, uncertain political relations, similar output structure etc, in this paper we will examine how the structural factors have affected India's export of manufactured goods to Bangladesh and how these factors explain the differences in India's and China's export performance in Bangladesh. The analysis is done by using the Constant Market Share Analysis (CMSA) which basically looks at how a country's export performance is influenced by the product and geographical structure of its exports. The analysis will cover the period 2005-2014.

The rest of the paper is organised as follows, Section II reviews the literature, Section III gives an overview of India and China's exports to Bangladesh, section IV provides the research methodology, section V, presents the estimation results and section V, the conclusion.

### 2. REVIEW OF LITERATURE

Studies that look at the comparative performance of India and China's trade in Bangladesh include, Sahoo (2013) who examines what has contributed to China's growing presence and India's decline in Bangladesh with respect to trade and investment. He finds that the number of commodities with Bilateral Revealed Comparative Advantage has been increasing for China and declining for India during 2000-07. He also finds that the most important factor responsible for China's growing exports to Bangladesh is price competitiveness.

Some of the studies that were undertaken to examine India's export performance using Constant market Share Analysis include, Biswas (1982) who applies the constant market share analysis to understand the export performance of India during 1959-68. Their decomposition reveals substantial unfavourable impact of commodity and market composition on India's exports. The competitive effect was however not insignificant and had a sizeable effect on India's export performance. Tiwari (1985) analyses the competitiveness of India's export during 1970-77 using constant market share analysis and finds that overall India's exports were competitive. However the export growth would have been better had it not been for a negative market distribution effect. Disaggregating India's exports into exports of the traditional and non traditional sector, he finds that India's export of traditional sector were uncompetitive while that of the non traditional sector were competitive. Veeramani (2007) investigates the growth of India's export growth pre (1962-90) and post (1993-94 to 2010-11) reform period using constant market share analysis. Decomposing India's export growth he finds that the actual export growth of India has not been up to the potential offered by the growth of world trade during the pre-reform period. The negative competitiveness effect and negative commodity composition effect were mainly responsible for the poor performance. In contrast, the actual export growth of India, in the case of both merchandise and services, has been above the potential throughout the post-reform period, with the positive competitiveness effect playing the main role, particularly for services exports. Singh (2014) attributes the accelerated performance of India's exports during 1991-2011 to its competitive strength, particularly in the manufactured goods exports. Market-wise analysis reveals that the competitiveness of India's exports in the markets of developing countries was higher than that of the developed countries. Commodity composition however affected India's exports adversely.

**3. IMPORTANCE OF THE STUDY**

Review of the literature reveals that there are hardly any studies that have looked at the comparative performance of India and China in Bangladesh. Given a wider concern that increasing China’s influence in South Asia could challenge India’s position in the region, this paper will examine if increase in China’s engagement has actually led to a displacement in India’s economic interaction with an important trade partner, namely Bangladesh, in the region.

**4. OVERVIEW OF TRADE BETWEEN INDIA AND BANGLADESH**

In this section export performance of India and China in Bangladesh in terms of shares and growth rate is described. The specialisation (labour intensive or capital/technology intensive) in the manufactured goods exports of two countries in Bangladesh is also presented along with the changes in their shares in Bangladesh’s imports from the world.

Table1 shows the trends in total manufacturing goods exports of India and China and their share in total exports of the respective countries to Bangladesh during 2005-14.

Table 1 also shows that while nearly 95 per cent of China’s total exports to Bangladesh are manufactured goods, India’s exports of manufactured goods have ranged between 50-60 per cent of its total exports. In 2005, nearly 52 per cent of India’s total exports to Bangladesh used to be of manufactured goods, this has increased to 61 per cent in 2014.

Exports of manufactured goods of both India and China have increased to Bangladesh. India’s exports to Bangladesh have quadrupled while that of China’s has increased by almost 5 times over the last decade. The share of China in world’s total manufactured goods exports to Bangladesh has seen a steady increase; the share of India has been erratic. Although, in 2014 India’s share at 15.5 per cent is much higher compared to that in 2000, it is less than the share of China—26.8 per cent— in 2000.

**TABLE 1: EXPORTS OF MANUFACTURED GOODS TO BANGLADESH-INDIA AND CHINA**

	India	China	India	China	India	China
	Manufactured goods \$ billion		Share of manufactured goods in total exports per cent		Share in total world exports of manufactured goods to Bangladesh per cent	
2005	0.89	2.31	51.51	95.96	10.29	26.80
2010	1.70	6.45	56.50	94.95	9.51	35.97
2014	3.81	11.17	60.95	94.83	15.51	45.45

Source: UNCOMTRADE

India’s exports of manufactured goods to Bangladesh, during 2005-14, grew at an annual average rate of 19.7 per cent which is quite comparable to that of China’s 20.6 per cent (Table 2). Dividing the time period into 2005-10 and 2010-14 shows that this was due to the fact that while India’s growth rate was significantly lower than that of China during the earlier period it was much higher than that of China’s in the later period.

**TABLE 2: ANNUAL AVERAGE GROWTH RATES OF EXPORT OF MANUFACTURED GOODS TO BANGLADESH- INDIA AND CHINA**

	India	China
	per cent	
2005-10	16.91	24.36
2010-14	27.34	22.64
2005-14	19.70	20.61

Source: UNCOMTRADE

Disaggregation of exports into labour intensive and capital/technology intensive manufactured goods is presented in Table 3. China exports more of labour intensive manufactured goods to Bangladesh. This is not surprising given the dominance of China in labour intensive industries. In contrast, India exports proportionately more of capital/technology intensive goods to Bangladesh. This too, is not surprising as there is an increasing bias towards capital intensive production in India which has skewed India’s export basket. According to Veeramani (2012) the share of capital intensive products has doubled during 1993-2010, while that of labour intensive goods has halved.

**TABLE 3: EXPORT OF LABOUR INTENSIVE AND CAPITAL/TECHNOLOGY INTENSIVE GOODS TO BANGLADESH-INDIA AND BANGLADESH**

	China		India		China	India	China	India
	LI	CI	LI	CI	Share in world exports of LI to Bangladesh		Share in world exports of CI to Bangladesh	
	\$ billion				per cent			
2005	1.53	0.78	0.38	0.51	38.06	9.42	16.94	11.06
2010	3.70	2.74	0.81	0.89	50.89	11.15	25.77	8.39
2014	6.72	4.46	1.57	2.24	58.18	13.64	34.18	17.16

Source: Author’s calculations.

Note: LI=Labour intensive goods; CI=Capital/technology intensive goods

Table 3 also shows that the share of India and China in world’s exports to Bangladesh of both labour intensive and capital/technology intensive goods has increased. China’s share has increased relatively more significantly in labour intensive goods while India’s share, in capital/technology intensive goods.

Overall, China’s performance has been much better than that of India’s in the exports of manufactured goods to Bangladesh. However, India has shown a improved performance during 2010-14. It would therefore be of interest to examine what factors were responsible for this.

**5. RESEARCH METHODOLOGY**

In order to analyse the comparative performance of manufacturing exports of India and China to Bangladesh, Constant Market Share Analysis (CMSA) has been used. The idea behind CMSA is that the product and geographical structure of a country’s exports can affect its export performance. Thus if a country’s exports are concentrated in products and markets where demand is weak, then its market share will fall even if a country maintains its share in every product and destination market.

The methodology of CMSA was developed by Tyszynski (1951) and later extended by Learner and Stern (1970). This analysis decomposes, ex-post, a country’s aggregated export growth into four components-World Trade Effect, Commodity Composition Effect, Market Distribution Effect and Competitiveness Effect. CMSA’s interpretation and usefulness was however questioned by Richardson (1971). Later efforts were made by Bowen and Pelzman (1984), Fagerberg and Sollie(1987), etc to improve the consistency and empirical applicability of this methodology.

In this paper we use the methodology developed by Fagerberg and Sollie(1987). Fagerberg and Sollie consider the change in market share instead of absolute change in exports. Their version of CMSA presents five effects: the product (PE) and market (ME) composition effects, the competitiveness (CE) effect, the product adaptation (PA) effect and the market adaptation (MA) effect. The latter two effects measure the extent of a country’s ability to adapt its exports to the changes in the commodity composition demanded in the importing country as well as the ability to redirect its exports to fast growing markets. Thus change in the market share ( $\Delta M$ ) of a country can be decomposed as:

$$\Delta M = PE + ME + CE + PA + MA \tag{1}$$

Fagerberg and Sollie version can be applied when a country is exporting to a number of destination markets as well as to a single market. As we want to analyse the export performance of manufacturing exports of India and China to just one market namely, Bangladesh, the change in market share of India(China) in Bangladesh would decompose into three effects— the competitiveness effect, the product composition effect and product adaptation effect. Thus,

$$\Delta M_i = \Delta X_i^a + \Delta X_i^b + \Delta X_i^{ab} \tag{2}$$

Where,

$$\Delta X_i^a = \sum (a_{it}^k - a_{i0}^k) b_{i0}^k \tag{3}$$

$$\Delta X_i^b = \sum (b_{it}^k - b_{i0}^k) a_{i0}^k \tag{4}$$

$$\Delta X_i^{ab} = \sum (a_{it}^k - a_{i0}^k) * \sum (b_{it}^k - b_{i0}^k) \tag{5}$$

And,

$a_i^k = x_i^k / X_w^k$ , where  $x_i^k$  is export of country i (India/ China) of commodity k to Bangladesh and,  $X_w^k$  is world export of commodity k to Bangladesh.

$b_i^k = x_i^k / X_i$ , where  $X_i$  = total export of country i.

$M_i = \sum a_i^k * \sum b_i^k$ , where  $M_i$  is market share of country i

$$\Delta M_i = M_t - M_0$$

The first term on the right-hand side of equation (2) measures the competitiveness effect, the second term the product composition effect and the third term, product adaptation effect. A positive value for the first term indicates that India (China) is gaining competitiveness in exports of manufactured goods in Bangladesh. Positive value for the second term shows that, India (China) is specialising in exports of those goods that have a high share in total imports of Bangladesh. Finally, the sign of the third term is positive if India (China) has been successful in adapting its exports to the changes in the commodity composition of Bangladesh.

The analysis uses annual export data in nominal US dollar and covers the period 2005 to 2014. The time period has been divided into 2005-10 and 2010-14 for the CMSA. The data used is SITC two digit level. The exports of manufactured goods are thus disaggregated into 35 categories presented in Table 4.

TABLE 4: SITC CLASSIFICATION

SITC Code	Description	SITC Code	Description
51	Organic chemicals	71	Power generating equipment
52	Inorganic chemicals	72	Industry special machinery
53	Dyeing/tanning/colour materials	73	Metalworking machinery
54	Pharmaceutical products	74	Industrial equipment nes
55	Perfume/cosmetic	75	Office/data processing machines
56	Manufactured fertilizers	76	Telecomms etc equipment
57	Plastics in primary form	77	Electrical equipment
58	Plastics non-primary form	78	Road vehicles
59	Chemical material/products nes	79	Railway/tramway equipment
61	Leather manufactures	81	Building fixtures etc
62	Rubber manufactures nes	82	Furniture/furnishings
63	Cork/wood manufactures	83	Travel goods/handbag/etc
64	Paper/paperboard/article	84	Apparel/clothing/accessories
65	Textile yarn/fabric/articles	85	Footwear
66	Non-metal mineral manufactures	87	Scientific/etc instruments
67	Iron and steel	88	Photographic equipment/clocks
68	Non-ferrous metals	89	Miscellaneous manufactures nes
69	Metal manufactures nes		

Source: UNCOMTRADE.

Exports of manufactured goods from India and China to Bangladesh have also been classified into labour intensive and capital/technology intensive goods for CMSA. The goods have been classified into the two categories as presented in Table 5.

TABLE 5: CLASSIFICATION OF MANUFACTURED GOODS INTO LABOUR AND CAPITAL/TECHNOLOGY INTENSIVE GOODS

	SITC 2 digit
Labour intensive goods	61 63 65 66 69 76 81 82 83 84 85 89
Capital/ Technology intensive products	51 52 53 54 55 56 57 58 59 62 64 66 67 68 71 72 73 74 75 76 77 78 79 86 87 88 89

Source: Kim S.J and GiSeung Kim, "South Korea's Trade Intensity with China, the USA, and Japan: Its Changes over the Period of 2002-11"

One important point to note is that as the export data used for CMSA is in nominal terms the market share of India/China would also be influenced by changes in the US dollar exchange rate. This needs to be kept in mind when interpreting the results as CMSA does not account for changes in market shares on account of changes in exchange rates.

## 6. ESTIMATED RESULTS

The results of the CMS decomposition during the time periods 2005-2010 and 2010-2014 are presented in Table 6. The section starts by presenting overall assessment of India and China's exports of manufactured goods to Bangladesh. Then a further analysis is presented which is decomposition at the category level namely, for labour intensive and capital/technology intensive goods.

The negative sign on the change in India's market share over 2005-10 (Table 6) indicates that overall India failed to maintain its share in Bangladesh imports in 2010. Decomposition of the total effect shows that this was mainly because, India's exports were not competitive vis-a-vis the rest of the countries exporting to Bangladesh. The product composition of India's exports too contributed to the decline in India's market share, although its contribution was small compared to that of the competitiveness effect. The only factor that contributed positively to India's export performance was India's ability to adapt its exports of manufactured goods according to the goods that were experiencing an increase in demand in Bangladesh. Had it not been for this, India's decline in market share would have been much more.

During 2010-14, overall, India increased its market share in Bangladesh. It was the significant positive contribution of competitiveness effect that resulted in the good performance of India's exports of manufactured goods. Product adaptation effect too contributed positively, although its contribution was much lower than in the previous time period.

TABLE 6: CONSTANT MARKET SHARE ANALYSIS –INDIA AND CHINA

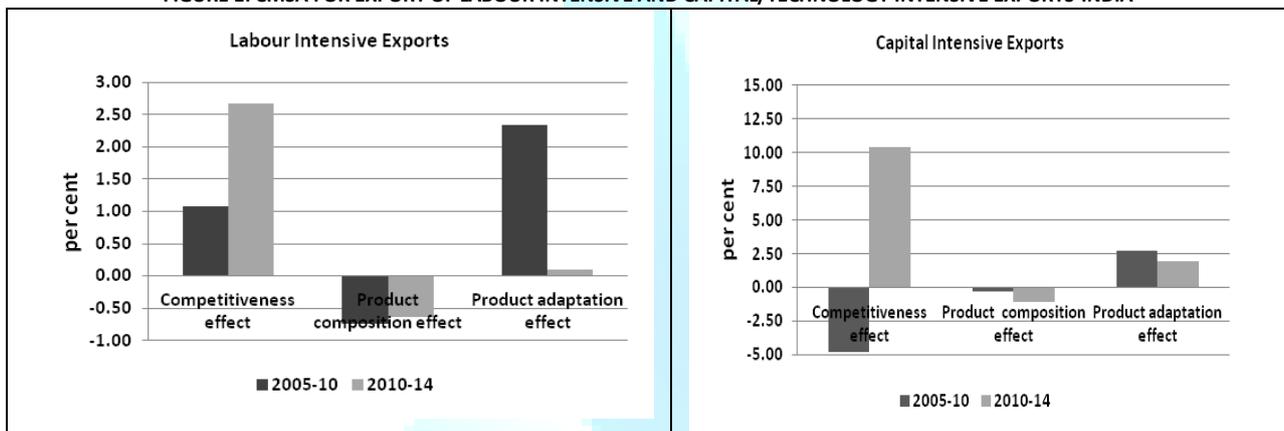
	Change in market share	Competitiveness effect	Product composition effect	Product adaptation effect
<b>India</b>				
2005-10	-0.23	-2.27	-0.80	2.84
2010-14	7.60	6.74	-0.84	1.70
<b>China</b>				
2005-10	9.17	11.02	-2.64	0.79
2010-14	7.19	5.93	-0.95	2.20

China increased its market share of exports of manufactured goods in Bangladesh during 2005-10. This increase was primarily because its exports were highly competitive vis-a-vis the other country's that were exporting to Bangladesh. The product adaptation effect also contributed positively although its contribution was quite small. The composition of manufactured products China was exporting to Bangladesh, however, was poor and the negative contribution was significant in impacting China's export performance.

During 2010-14, China's market share increased because of positive contribution from competitiveness effect. The contribution however was less than in the previous time period. The contribution of product adaptation effect increased significantly during this period. Product composition's contribution continued to have a negative effect on China's export performance, although this contribution declined significantly compared to 2005-10.

A further decomposition is done to see which category of products—labour intensive or capital/technology intensive— was mainly responsible for the results shown at the aggregate level. The results for India and China are presented in Figure 1 and Figure 2 respectively.

FIGURE 1: CMSA FOR EXPORT OF LABOUR INTENSIVE AND CAPITAL/TECHNOLOGY INTENSIVE EXPORTS-INDIA

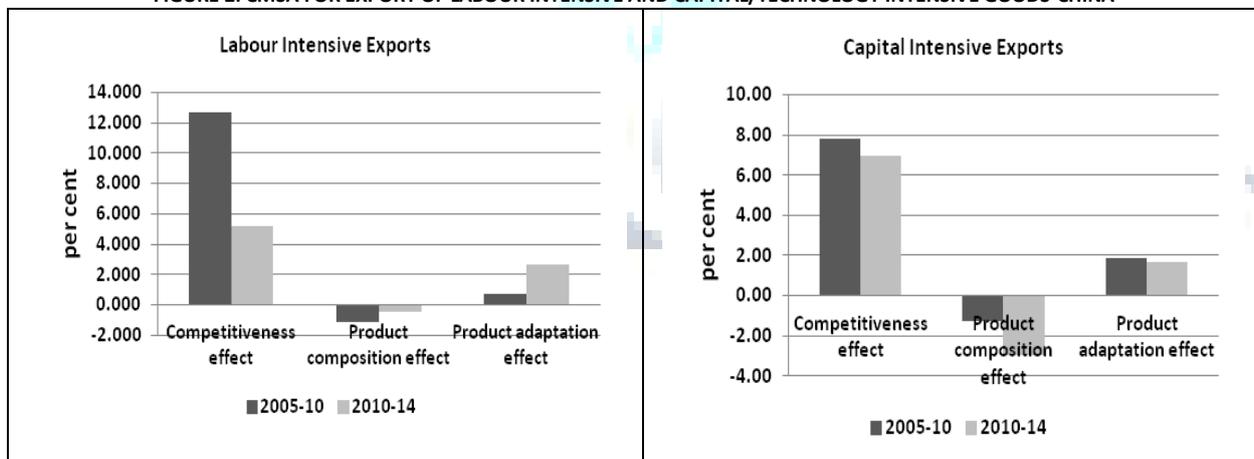


The results in Figure 1 indicate that the inability of India to maintain its market share in 2005-10 was primarily because of lack of competitiveness of its export of capital/technology intensive goods. The labour intensive goods were competitive particularly textile yarn (SITC 65) and non-metal mineral manufactures (SITC 66). The negative contribution of product composition at the aggregate level was because of greater contribution from the composition of labour intensive goods. Although product adaptation effect was positive for both labour intensive and capital intensive goods, the contribution of labour intensive goods was much greater.

During 2010-14, there was an all round improvement in the contribution of competitiveness effect, but the improvement in capital intensive goods was impressive. The contribution of product composition effect to India's market share continued to be negative and the negative contribution was more because of labour intensive goods. Although the contribution of product adaptation effect was positive, the contribution was significantly lower in the case of labour intensive goods.

The CMSA results for China in Figure 2 show that both labour intensive and capital/technology intensive goods contributed to the positive competitiveness effect of China's manufactured exports to Bangladesh during 2005-10. The contribution of labour intensive exports was however much higher. All labour intensive goods, except leather manufactures (SITC 61), contributed positively to the competitiveness of China's overall exports of manufactured goods. Similarly all capital/technology intensive goods, except inorganic chemicals (SITC 52), had a positive sign for competitiveness effect.

FIGURE 2: CMSA FOR EXPORT OF LABOUR INTENSIVE AND CAPITAL/TECHNOLOGY INTENSIVE GOODS-CHINA



It was seen that, overall, China's exports were less competitive in 2010-14 relative to 2005-10. The decline in China's competitiveness effect in 2010-14 was mainly because of lower contribution from export of labour intensive goods. Product-wise, competitiveness effect in 2010-14 turned negative for cork/wood manufactures (SITC 63) and telecommunication equipment (SITC 76). China's product composition of capital/technology intensive products worsened and was the main contributor to negative contribution of product composition of total exports of manufactured goods to Bangladesh. Although, China was able to adapt its products of labour intensive goods, there was a decline, albeit small, in product adaptation of capital/technology intensive exports.

## 7. CONCLUSION

China overtook India, in the last decade, to become the main exporter of manufactured goods to Bangladesh relegating India to the second position. Although China has increased its share in imports of Bangladesh, this has not happened at the cost of India as India too has increased its share in Bangladesh. Even if we look at the growth rate of the two countries' exports to Bangladesh, during 2005-14, we find them to be comparable. However a break-up of this time period into two— 2005-10 and 2010-14— shows that India's performance improved in the latter period which contributed to the almost similar growth rate for the entire period of analysis.

In order to understand how the structural factors played a part in the differences in the export performance of India and China in Bangladesh and, differences in India's and China's performance during 2005-10 and 2010-14, a CMSA was applied. It was found that China's impressive performance in Bangladesh was primarily because its exports of manufactured goods were very competitive in comparison with the other competing countries.

It was also found that the improved performance of India in during 2010-14 was primarily because of significant improvement in the competitiveness of India's capital/technology intensive and labour intensive goods exports to Bangladesh. On the other hand, China's comparatively less increase in market share, during the same time period, was because of a decline in competitiveness of its exports of labour intensive goods and negative contribution to product composition effect of the capital/technology intensive exports.

Two limitations of this study however must be kept in mind. First, the study is based on two points of time and therefore cannot reveal the evolution of competitiveness of India and China for the whole span of time. Second, the CMSA model reveals that a country's exports are competitive or lack competitiveness. It does not however explain whether the competitiveness is because of price or non price factors.

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